SDMS US EPA REGION V -1

SOME IMAGES WITHIN THIS DOCUMENT MAY BE ILLEGIBLE DUE TO BAD SOURCE DOCUMENTS.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

AUG 1 3 1992

Mr. Joseph M. Grana Manager of Environmental Affairs Cerro Cooper Products Company 3000 Mississippi Avenue Sauget, Illinois 62202

REPLY TO THE ATTENTION OF:

AUG 19 1992

SP-14J

Re: PCB Compliance Inspection

Date: April 3, 1992

Dear Sir:

A Representative of the United States Environmental Protection Agency (U.S. EPA) conducted a PCB compliance inspection at the above facility on the above date.

Based upon the data collected during that inspection, the U.S. EPA has determined that no violations of the Federal PCB regulations, 40 C.F.R. Part 761, were evident at the time of the inspection.

If you have any questions, please do not hesitate to call this office at 312-886-6906.

Sincerely,

Ly endi

Thelma Y. Codina, P.E., Acting Chief PCB Control Section

C: PEC MMN RTB

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Other Addressees

CERRO COPPER PRODUCTS CO.

P. Tandler R.E.Conreaux

INTERNAL MEMORANDUM

File

To: Distribution

Date: April 3, 1992

From: J. M. Grana

Subject: IEPA - PCB Inspection

April 3, 1992

Distribution: M. McNerney

J. Burroughs R. Thompson

B. Novak

Mr. Mark Johnson, from the Illinois Environmental Protection Agency arrived at Cerro at approximately 9:40 am to perform a PCB inspection. He left Cerro at approximately 11:50 am. He stated that the IEPA is under contract with the USEPA to inspect about 100 sites per year.

During the inspection Mr Johnson spent nearly one hour asking questions concerning our past activities with PCBs. We provided general information and history of the company, electrical equipment and waste oil. Roy Thompson provided information on the electrical equipment and Joe Burroughs and this writer provided information on the company and the waste oil.

Mr. Johnson then reviewed our records on the PCB equipment and transformer analysis. He requested copies of the reports from the S.D. Meyers analytical results.

Then Joe & Roy escorted Mr. Johnson to the capacitor banks and the two former PCB transformers, #35 & #36. Both transformers are located in the Tube Mill. Samples of the #7 Fenn Mill's hydraulic system and the waste oil tank were also taken by Mr. Johnson.

When queried if there were any violations he would be reporting, he said that there are none from the inspection and that if there are no PCBs in the two samples we would receive a letter from the USEPA stating that there was no violations. He commented that the records looked good. Roy Thompson should be commended for keeping accurate and complete records. We will only have to maintain these records for 2 more years until July 1, 1994, then they can be discarded.

Bill Novak should also be commended for having a neat and orderly oil storage yard when the inspection occurred.

Cerro should receive a letter from the USEPA in about 6 months. He also said that this would most likely be our last inspection of this type.

C01406

US ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

| TOXIC | SUBST4 | MCFS | CONTROL | ACT |
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Form Approved OMB No. 2070-0007 Expires 3-31-88

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US ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

TOXIC SUBSTANCES CONTROL ACT

Form Approved
OMB No. 2070-0007
Expires 3-31-88

TSCA INSPECTION CONFIDENTIALITY NOTICE

1. INVESTIGATION IDENTIFICATION
DATE, INSPECTOR NO. DAILY SEQ. NO.

1. INSPECTOR NO. DAILY SEQ. NO.

1. INSPECTOR NAME

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5. INSPECTOR ADDRESS

2. ON MISSISSIPPI Ave.

5. CHIEF EXECUTIVE OFFICER NAME

7. TITLE

TO ASSERT A CONFIDENTIAL BUSINESS INFORMATION CLAIM

It is possible that EPA will receive public requests for release of the information obtained during inspection of the facility above. Such requests will be handled by EPA in accordance with provisions of the Freedom of Information Act (FOIA), 5 USC 552; EPA regulations issued thereunder, 40 CFR Part 2; and the Toxic Substances Control Act (TSCA), Section 14. EPA is required to make inspection data available in response to FOIA requests unless the Administrator of the Agency determines that the data contain information entitled to confidential treatment or may be withheld from release under other exceptions of FOIA.

Any or all the information collected by EPA during the inspection may be claimed confidential if it relates to trade secrets or commercial or financial matters that you consider to be confidential business information. If you assert a CBI claim, EPA will disclose the information only to the extent, and by means of the procedures set forth in the regulations (cited above) governing EPA's treatment of confidential business information. Among other things, the regulations require that EPA notify you in advance of publicly disclosing any information you have claimed as confidential business information.

A confidential business information (CBI) claim may be asserted at any time. You may assert a CBI claim prior to, during, or after the information is collected. The declaration form was developed by the Agency to assist you in asserting a CBI claim. If it is more convenient for you to assert a CBI claim on your own stationery or by marking the individual documents or samples "TSCA confidential business information," it is not necessary for you to use this form. The inspector will be glad to answer any questions you may have regarding the Agency's CBI procedures.

While you may claim any collected information or sample as confidential business information, such claims are unlikely to be upheld if they are challenged unless the information meets the following criteria:

Your company has taken measures to protect the confidentiality of the information, and it intends to continue to take such measures.

- The information is not, and has not been, reasonably obtainable
 without your company's consent by other persons (other than
 governmental bodies) by use of legitimate means (other than
 discovery based on showing of special need in a judicial or
 quasi-judicial proceeding).
- The information is not publicly available elsewhere.
- Disclosure of the information would cause substantial harm to your company's competitive position.

At the completion of the inspection, you will be given a receipt for all documents, samples, and other materials collected. At that time, you may make claims that some or all of the information is confidential business information.

If you are not authorized by your company to assert a CBI claim, this notice will be sent by certified mail, along with the receipt for documents, samples, and other materials to the Chief Executive Officer of your firm within 2 days of this date. The Chief Executive Officer must return a statement specifying any information which should receive confidential treatment.

The statement from the Chief Executive Officer should be addressed

EMMA AVANT

U.S.E.P.A. REGION I

230 S. DENEGRAN(55PT-11-TUB)

and mailed by registered, return-receipt requested mail within 7 calen-

and mailed by registered, return-receipt requested mail within 7 calender days of receipt of this Notice. Claims may be made any time after the inspection, but inspection data will not be entered into the special security system for TSCA confidential business information until an official confidentiality claim is made. The data will be handled under the agency's routine security system unless and until a claim is made.

| TO BE COMPLETED BY FACILITY OFFICIAL RECEIVING THIS NOTICE: I have received and read the notice | If there is no one on the premises of the facility who is authorized to make business confidentiality claims for the firm, a copy of this Notice and other inspection materials will be sent to the company's chief executive officer. If there is another company official who should also receive this information, please designate below. |
|--|---|
| SIGNATURE Man | NAME |
| JOSEPH M. GRANA | TITLE |
| Manager of Affairs 4-3-90, | ADDRESS |

SEPA

US ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DO 20460

TOXIC SUBSTANCES CONTROL ACT

Form Approved OMB No. 2070-0007 Expires 3-31-88

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Other Addressees

CERRO COPPER PRODUCTS CO.

P. Tandler R.E.Conreaux

INTERNAL MEMORANDUM

File

To: Distribution

Date: April 2, 1992

From: J. M. Grana

Subject: IEPA - PCB Inspection

Distribution: M. McNerney

J. Burroughs R. Thompson B. Novak

T. Hanratty

On Friday April, 3, 1992 at approximately 9:30 am. an inspector, Mr. Mark Johnson, from the Illinois Environmental Protection Agency will visit Cerro to inspect our substations, oil storage area and our PCB records.

Mr. Johnson will said he will probably take samples. Any samples taken by Mr. Johnson should be split with Cerro for our own analysis.

Joe Burroughs will escort Mr. Johnson on his inspection and I am requesting that Roy Thompson be available to also help with the inspection and records review. I along with Joe and Roy will have a pre-inspection and post-inspection meeting. If anyone else would like to be present during these meetings, please let me know.

Also by copy of this memo, I am requesting that records and the oil storage area be in order in preparation for the inspection.

Just

Other Addressees

J. J. Hintz R. Moldovan J. M. Grana

CERRO COPPER PRODUCTS CO.

INTERNAL MEMORANDUM

: File

To: P. Tandler

Date: June 25, 1991

From: J. D. Burroughs

Subject: Alternate Capacitor Disposal Site

In reviewing the use of Tipton Environmental Technologies, a part of Rollins, the Missouri Department of Natural Resources was contacted. The individual contacted was Lyle Crocker who is in charge of on-site inspections of PCB facilities. His comment was that they are "squeaky clean". The facility is given an annual inspection and is also inspected otherwise two or three times each year. There is no pending litigation against the company under the PCB program or under the Hazardous Waste Program. There is no disposal at this site, but the materials are shipped elsewhere for disposal.

Connie Augustine of Transtec Environmental informed me that the capacitors from Cerro would be shipped on to the Deer Park, Texas, facility of Rollins for incineration. Her understanding was that Tipton would become the generator for the second movement. Augustine could not say where a certificate of destruction would orginate and is to call back on that point.

My recommendation is that we allow Transtec Environmental to use Tipton Environmental Technologies as requested.

FAX: (618) 337-7273

FACSIMILE TRANSMISSION COVER SHEET

| DATE: | 6-25-91 |
|---|------------------|
| TIME: | 3:15 |
| TO: FAX NO.: | Connie Augustine |
| FROM: | Paul Tandler |
| | |
| NUMBER PAGES INCLUDING COVER SHEET: | 2 |

MESSAGE (if any):

PLEASE CALL (618) 337-6000 - EXT. 209 IF THERE ARE ANY PROBLEMS WITH THIS TRANSACTION

PANSTEC CHANGE ORDER

JCB NG.: 30570

| THIS (| CHANG | E QRD | er Mo | Oifies: |
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PURCHASE ORDER NO.: 96210

| CERRO COPPER PR | ODUCTS COMPANY |
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| OR CHANGES: | Change order no.: 570–01 |
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TRANSTEC Environmental, Inc. 3766 Tulane N.E. Louisville, OH 44641 Phone: (216) 875-1419 (800) 325-6899 Fax: (216) 875-1868

FAX COVER SHEET

DATE: June 25, 1991

FROM: Connie Augustine

TO: Rich Moldovan/Cerro

FAX#: 618-337-7273

NUMBER OF PAGES INCLUDING COVER PAGE: 2

TIME TRANSMITTED: 11:30

RE: PCB Disposal Quote No. 9850

COMMENTS:

Dear Mr. Moldovan,

Following is paperwork we spoke about earlier this morning. Please have someone approve and fax back to me today. Please call should you have questions.

Thanks,

connie

Other Addressees

P.Tandler

J.Burroughs

CERRO COPPER PRODUCTS CO.

INTERNAL MEMORANDUM

File

To: Roy Thompson

Date: May 14, 1991

From: J. M. Grana

Subject: Annual PCB Record Update

As required by TSCA regulations, you update the PCB log sheet by July 1. During 1990 there was extensive removal of PCB material from Cerro as the result of the Dead Creek cleanup. Below for your records is the following data.

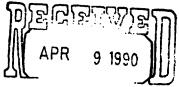
16,971.6 Tons of PCB contaminated (PCB ppm>50ppm) soil and sediment was removed from Cerro. This equates to 33,943,200 lbs or 15,396,395 kg.

All the PCB material was disposed of in Chemical Waste Management's Emelle Alabama landfill.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460



E&E AFFAIRS

OFFICE OF PEST:CIDES AND TOXIC SUBSTANCES

GRANA JOSEPH M CERRO COPPER PRODUCTS CO PO BOX 66800 ST LOUIS, MO 63166-6800 (TS-798) March 29, 1990 0986

Subject: Notification of PCB Activity

Thank you for filing the Notification of PCB Activity form dated February 21, 1990 for the facility location listed below:

CERRO COPPER PRODUCTS CO
IL RTE 3 ALTON & SOUTHERN TRACKS
SAUGET, IL 62202

Please be advised that the EPA Identification Number for the above facility is correctly stated on your form as ILD080018914.

Sincerely,

Tony Baney, Chief Chemical Regulation Branch CERRO COPPER PRODUCTS CO.
P.O. Box 66800
St. Louis, MO 63166-6800

618/337-6000

February 22, 1990

Chemical Regulation Branch
Office of Toxic Substances TS-798
U. S. Environmental Protection Agency
401 M St., SW
Washington, DC 20460

RE: Notification of PCB Activity

Dear Sir or Madam:

Cerro Copper Products Co. currently does not store PCB contaminated materials at the site. In the course of proposed response activity being discussed between Cerro Copper Products Co. and the Illinois Environmental Protection Agency, however, currently scheduled to begin soon after May 7, 1990, Cerro Copper Products Co. may excavate, store for disposal and, ultimately, dispose of PCB contaminated soil and debris believed to be caused by PCB's originating from off-site and not from activities of Cerro Copper Products Co. Therefore, in accordance with 40 C.F.R. §761.205(a)(2), Cerro Copper Products Co. is filing required Form 7710-53.

If you should have any questions, please feel free to contact this office.

Very truly yours,

CERRO COPPER PRODUCTS CO.

oseph M. Grana

Manager of Environmental

and Energy Affairs

JMG/ge

cc: Paul Takacs-Illinois EPA

bcc: H. L. Schweich

P. Tandler

R. J. Avendt

M. L. Rodburg, Esq.

SEPA

United States Emironmental Protection Agency

Washington, DC 20460

Notification of PCB Activity

Form Approved OMB No. 2070-0112 Approval expires J2-31-92

| No information on this form | may be dialmed as TSCA Cel. |
|--|--|
| Return To: | For Official Use Only |
| Chemical Regulation Branch Office of Toxic Substances TS-798 U.S. Environmental Protection Agency 401 M St., SW Washington, DC 20460 | TSCA FC3 :D Number |
| Cerro Copper Products Co. Cerro Copper | (if aiready assigned under RCRA) |
| P.O. Box 66800 St. Louis, Missouri 63166-6800 | Il. Route 3 @ Alton & Southern Tracks Sauget, Illinois 62202 |

V. Installation Contact (Name and Title)

Joseph M. Grana

Manager of Environmental Affairs

VI. Type of PCB Activity (Marx X' in appropriate box. See instructions.)

A Generator with onsite Storage facility

B. Storage (Commercial)

elegations Number (Area Code and Number) (618)337-6000

C. Transporter

D. Permitted Disposer

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory

responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Signature

Name and Official Title (Type or print)
Paul Tandler Vice

Vice President

2-21-93

Paperwork Reduction Act Notice

The public reporting burden for this collection of information is estimated to average 1.5 hours per response. This estimate includes time for reviewing instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information to the Chief, Information Policy Branch (PM-223), US Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked ATTENTION: Desk Officer for EPA.



P.O. Box 66800 St. Louis, MO 63166-6800 618/337-6000

April 9, 1990

Raymond J. Avendt, Ph.D., P. E. Vice President-Environmental Activities The Marmon Group 225 W. Washington St. Chicago, IL 60606

RE: PCB Activity Notification

Dear Ray:

Attached is a letter from U.S.EPA advising Cerro that the subject notification was filed and the PCB activity number will be the same as our RCRA I.D. number.

Very truly yours,

CERRO COPPER PRODUCTS CO.

Joseph M. Grana

Manager of Environmental and Energy Affairs

JMG/ge

Encl.

cc: P. Tandler

M. Rodburg



P.O. Box 66800 St. Louis, MQ 63166-6800 618/337-6000 Tie.

January 5, 1990

Raymond J. Avendt, Ph.D., P. E. Avendt Group, Inc. 432 N. Saginaw St., 3rd Floor Flint, MI 48502

RE: PCB Storage

Dear Ray:

On December 21, 1989 the U.S.EPA issued final rules regarding PCB activities. These regulations cover notification, manifesting and recordkeeping. Federal Register, Vol. 54, No. 244, page 52716-52756, is attached.

After reviewing the rules, I concluded that Cerro should make the notification in order to receive a PCB Generators I.D. number. This is based on the fact that when we proceed to remove sediment from Dead Creek and dewater (process) the sediment for disposal, there will be a period of storage. See paragraph 761.205(c)(2)(ii) of the regulation. Additionally, Cerro will need this number to ship waste to a disposal facility. A disposal facility is prohibited from receiving PCB wastes after June 4, 1990 without a I.D. number.

In order not to delay any remediation activity, Cerro should apply for a number. Do you agree with my interpretation of these new rules? When do you think we should apply for the I.D. number?

Sincerely,

CERRO COPPER PRODUCTS CO.

Joseph M. Grana

Manager of Environmental

and Energy Affairs

JMG/ge

Attachments

cc: H. L. Schweich (w/o attachments)

P. Tandler (w/o attachments)

M. Rodburg (w/attachments)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION VII

726 MINNESOTA AVENUE

KANSAS CITY, KANSAS 66101

JAN 1 6 1990

ENVIRONMENTAL NEWS

EPA Administrator William K. Reilly signed into effect new regulations under the Toxic Substances Control Act (TSCA) which strengthen EPA control over the disposal and storage of polychlorinated biphenyls (PCBs) on December 21, 1989, in Federal Register, Vol. 54, No. 244, Page 52716 (54 FR 244, P. 52716).

PCBs are harmful because they persist in the environment, are not readily degradable and build up in the fatty tissues and vital organs of humans, animals and aquatic life. Animal tests have shown that PCBs cause chronic toxic effects and can cause reproductive problems, gastric disorders, skin lesions and cancerous tumors. PCBs are known to cause chloracne, a painful, disfiguring skin illness, in humans.

The final Notification and Manifesting Rule signed by Mr. Reilly tightens EPA's jurisdiction over PCBs by adopting notification and manifesting requirements for PCB waste already regulated under TSCA. These requirements will increase EPA's ability to identify and track PCB waste from generation to disposal at approved facilities. They also establish EPA oversight of the activities and qualifications of PCB waste brokers and other intermediate retainers who may store PCB waste generated by others.

The rule adds to TSCA disposal regulations a new PCB wastetracking system modeled after the Resource Conservation and Recovery Act (RCRA) method of tracking hazardous waste. The tracking system requires PCB waste handlers (disposers, commercial storers, transporters and generators with PCB storage areas) to notify EPA of their PCB waste activities and to use the RCRA uniform manifest when shipping regulated PCB waste.

The final rule also bolsters safeguards for PCB storage facilities by requiring that all commercial storers of PCB waste apply for written approval from the appropriate EPA Regional Administrator within 244 days from the signing of this rule. Aprovals will be issued only after a thorough evaluation of the applicant's qualifications in the waste storage business, the quality of his closure plans and proof of financial responsibility. The review of an applicant's qualifications will include, among other things, the environmental compliance history of the company, principals and key employees.

The rule establishes additional record-keeping and reporting requirements that will complete the PCB waste-tracking system and facilitate EPA's enforcement of PCB disposal regulations.

Under the Toxic Substances Control Act, EPA began regulating PCBs in 1978 and virtually banned their manufacture, processing and distribution in commerce in 1979. Some PCBs are still used in their primary function as an insulating liquid in electrical transformers and capacitors. EPA has control over continued use and disposal of PCBs.

For more information, contact the TSCA hotline at (202) 554-1404 or Region VII EPA at (913) 236-2835.

CERRO COPPER PRODUCTS CO.

CERRO

A member of The Marmon Group of companies

 P.O. Box 681 East St. Louis, Illinois 62202 618/337-6000

February 26, 1986

CERTIFIED MAIL

Ms. Marion Young Toxic Substances Section (5S-P&TSB-7) U. S. Environmental Protection Agency 230 South Dearborn Chicago, IL 60604

RE: Notice of Noncompliance Cerro Copper Products Co.

Dear Ms. Young:

Referring to Mr. William H. Sanders' letter dated January 31, 1986 please be advised that PCB annual documents have been developed for each calendar year beginning July 2, 1978, and are kept on file at this facility.

We, therefore, certify that the violations relating to incomplete PCB annual documents, referenced in the Notice of Noncompliance attached to Mr. Sanders' letter, have been corrected.

Yours very truly,

CERRO COPPER PRODUCTS CO.

A member of The Marmon Group

of company es

Paul Tandler

Vice President-Manufacturing

PT/ge

bcc: H. L. Schweich, w/letter and "notice" only

S. A. Silverstein " " "

B. Ottofy

File 2400

| | Removed From Service | In Storage for Disposal | In Transport for Disposal | In Service at |
|-----------------------------|-------------------------|----------------------------|------------------------------|-------------------------------|
| CBs/PCB Items in Containers | NONE | NONE | NONE | |
| CB Transformers | NONE | NONE | NOWE | NONE |
| °CB Capacitors | NONE | NONE | NONE | WEIGHTPER.CA 31.18KILOGRAL |

⁽B) Induction Heaters at Press

| | Removed From Service | In Storage for Disposal | In Transport for Disposal | In Service at En of Year |
|---|-------------------------|----------------------------|------------------------------|---|
| CBs/PCB Items in Containers | NONE | None | NONE | |
| CB Transformers DE-ChoRINATION OF 2 TRANSF | ORM ER | NONE | 23 DRums | |
| CB Capacitors | NONE | NONE | NONE | WEIGHTPER.CAP. 31.18KILOGRAM 65 (B) |

⁽B) Induction Heaters at Press

| | Removed From Service | In Storage for Disposal | In Transport for Disposal | In Service at E of Year |
|------------------------------|-------------------------|----------------------------|------------------------------|---|
| PCBs/PCB Items in Containers | NONE | ルのんだ | NONE | |
| PCB Transformers | NONE | NONE | NONE | TOTAL WEIGHT 2,270.47 KILOGR. |
| PCB Capacitors | NONE | NONE | NONE | WEIGHT PER. CAP. 31-18KILOGRAM 65 B |

- (A) Tube Mill South & Tube Mill North
- (B) Induction Heaters at Press

*

| | Removed From Service | | | In Service at En | |
|--------------------------------|-------------------------|------|------|------------------------------------|--|
| PCBs/PCB Items in Containers . | | | | | |
| - | NONE | NONE | NONE | NONE TOTAL WEIGHT | |
| PCB Transformers | NONE | NONE | NONE | 2,270,47 KILOGRA 2 | |
| PCB Capacitors | | | | WEIGHT PER. CAP. 31.18 KILOGRAM | |
| | NONE | NONE | NONE | 65 B | |

- (A) Tube Mill South & Tube Mill North
- (B) Induction Heaters at Press

Date 7-2-1981

CERRO COPPER PRODUCTS CO. Sauget, Illinois 62202

| | Removed From Service | In Storage for Disposal | In Transport for Disposal | In Service at E of Year |
|--------------------------------|-------------------------|----------------------------|------------------------------|--|
| PCBs/PCB Items in Containers . | NONE | NONE | NONE | NONE |
| PCB Transformers | NONE | NONE | NONE | TOTAL WEIGHT 2,270,47 KILLOGR. |
| PCB Capacitors | NONE | NONE | NONE | WEIGHT PER. CAP. 31.18 KILOGRAM 65 B |

- (A) Tube Mill South & Tube Mill North
- (B) Induction Heaters at Press

| | | | | |
|--------------------------------|-------------------------|----------------------------|------------------------------|-------------------------------------|
| | Removed From Service | In Storage for Disposal | In Transport for Disposal | In Service at E of Year |
| | | | | |
| PCBs/PCB Items in Containers . | NONE | NONE | NONE | NONE |
| PCB Transformers | | | | TOTAL WEIGHT 2,270,47 KILOGR. |
| | NONE | NONE | NONE | 2 A |
| PCB Capacitors | | | | WEIGHT PER. CAP. 31.18 KILO GRAM |
| | NONE | NONE | NONE | 65 B |

- (A) Tube Mill South & Tube Mill North
- (B) Induction Heaters at Press

| | Removed From Service | In Storage for Disposal | In Transport for Disposal | In Service at En of Year |
|------------------------------|-------------------------|----------------------------|------------------------------|---|
| PCBs/PCB Items in Containers | NONE | NONE | NONE | |
| PCB Transformers | NONE | NONE | NONE | TOTAL WEIGHT 2,270,47 KILOGRAN |
| PCB Capacitors | NONE | NONE | NONE | WEIGHTPER.CAP. 31.18KILOGRAM 65 B |

- (A) Tube Mill South & Tube Mill North
- (B) Induction Heaters at Press

| | Removed From Service | In Storage for Disposal | In Transport for Disposal | In Service at End of Year |
|------------------------------|-------------------------|----------------------------|------------------------------|--|
| PCBs/PCB Items in Containers | NONE | NONE | NONE | NONE |
| PCB Transformers | NONE | NONE | NONE | TOTAL WEIGHT 2,270.47 KILOGRAM 2 |
| PCB Capacitors | NONE | NONE | NONE | WEIGHT PERCAP. 31.18 KILOGRAM 65 (B) |

⁽A) Tube Mill South & Tube Mill North

⁽B) Induction Heaters at Press



UNITED STATES ENVIRONMENTAL PROTECTION AG

REGION 5

230 SOUTH DEARBORN ST. CHICAGO, ILLINOIS 60604

BY P.T.

REPLY TO THE ATTENTION OF:

5S-P&TSB-7

JAN 3 1 1986

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Paul Tandler Vice President, Manufacturing Cerro Copper Products Company P.O. Box 681 (Highway 3) East St. Louis, Illinois 62202

Re: Notice of Noncompliance

Cerro Copper Products Company

Dear Mr. Tandler:

On August 6, 1985, representatives of the United States Environmental Protection Agency (U.S. EPA) conducted an inspection of the Cerro Copper Products Company, P.O. Box 681, Highway 3, East St. Louis, Illinois 62202.

Enclosed is a Notice of Noncompliance issued to the Cerro Copper Products Company for violation of the polychlorinated biphenyl (PCB) recordkeeping requirements set forth in the Code of Federal Regulations, 40 CFR Part 761. During that inspection, the inspectors observed that, although company records are kept on the disposition of its PCB items, the records as PCB annual documents are incomplete. PCB annual documents must be developed to show the total number of PCB capacitors handled at the facility, including the dates when removed from service, placed into transport for disposal and the total number of PCB capacitors remaining at the facility for each calendar year. beginning July 2. 1978. These records shall form the basis of an annual document prepared for each facility by July 1 covering the previous calendar year. Failure to develop and maintain complete annual PCB documents is a violation of 40 CFR Section 761.180(a) a suggested format is enclosed for your use in preparing annual PCB documents according to the regulations.

Within thirty (30) days of receipt of this Notice of Noncompliance, Cerro Copper Products Company, must submit a certified statement that the violation has been corrected. That statement must be submitted to:

Ms. Marion Young
Toxic Substances Section (5S-P&TSB-7)
U.S. Environmental Protection Agency
230 South Dearborn
Chicago, Illinois 60604

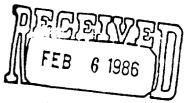
A copy of the inspection report is enclosed for your information. If you have any questions, please do not hesitate to contact Ms. Marion Young at (312) 353-2291.

Sincerely,

William H. Sanders III, P.E.

Director, Environmental Services Division

Enclosures



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY BY P. T.

Region V

| IN THE MATTER OF: |) | |
|---|-------------|-------------------------|
| CERRO COPPER PRODUCTS COMPANY P.O. BOX 681, HIGHWAY #3 EAST ST. LOUIS, ILLINOIS 62202 |))) | NOTICE OF NONCOMPLIANCE |

Notice is hereby given that you are in violation of the polychlorinated biphenyl (PCB) recordkeeping regulations, 40 CFR Part 761, promulgated pursuant to the Toxic Substances Control Act (TSCA), 15 U.S.C. Section 2614.

On August 6, 1985, representatives of the United States Environmental Protection Agency (U.S. EPA) conducted an inspection of the above referenced facility. During that inspection, the inspectors observed that PCB annual documents developed by the Cerro Copper Products company were incomplete. Failure to develop and maintain complete annual PCB documents is a violation of 40 CFR Section 761.180(a).

This Notice of Noncompliance is issued by the U.S. EPA in lieu of further action at this time provided these violations will be promptly corrected. Within thirty (30) days of receipt of this Notice of Noncompliance, the Cerro Copper Products Company, must submit a written, certified statement that the violations of the PCB regulations have been corrected. Failure to correct the violations and to submit such a statement may cause the U.S. EPA to proceed with additional enforcement action as provided

| i n | TSCA, | 15 | U.S.C. | Section | 2601, | including | possible | imposition | of | civi l |
|-----|---------|----|--------|---------|-------|-----------|----------|------------|----|--------|
| per | nalties | s. | | | | | | | | |

William H. Sanders III, P.E.
Director, Environmental Services Division
U.S. Environmental Protection Agency
Region V

| Dated: | 1/ | 311 | 186 | |
|--------|----|-----|-----|------|
| | | | | |

PCB ANNUAL DOCUMENT* (A SUGGESTED FORMAT)

| Removed from Service** | In Stora | ge for Disposal | In Transport | for | Disposal | 1 | In Service at End of Year |
|---|----------|-----------------|--------------|-----|-----------------|--------------|---|
| Dates | | | | | • | 1 | |
| Quantities | | | | • | | | Quantities |
| PCBs/PCB Items in Containers | | | | | | | * PCBs/PCB Items in Containers |
| - Total kg , - ID of Contents | | | • | | ı | / / | Total kgID of Contents |
| ▲ Liquid ▲ Capacitors | \ | • | | | > | / // / | ▲ Liquids △ Capacitors |
| PCB Transformers | | | | ٠. | • | / | * PCB Transformers |
| - Total Number - Total kg of PCBs in Transformers | | | , | | • | //// | - Total Number - Total kg of PCBs in Transformers |
| PCB Capacitors: | 1 | | | | | | * PCB Capacitors |
| - Total Number | · | | , | | | / | - Total Number |

^{*}A. Document required if facility is using or storing at one time:

- At least 45 kg (99.4 lb) of PCBs; or
 l or more PCB transformers; or
- 3. 50 or more PCB large capacitors.
- B. Document must be prepared by July 1 for previous calendar year.
- C. Document must cover Jan. 1 thru Dec. 31 for any calendar year.

Removed from Service:

- 1. Location of initial disposal or storage facility.
- 2. Name of owner or operator of the facility.

REPORT ON INSPECTION TO DETERMINE
COMPLIANCE WITH THE PCB DISPOSAL
AND MARKING REGULATIONS

CERRO COOPER PRODUCTS COMPANY
P.O. BOX 681
EAST ST. LOUIS, ILLINOIS 62202

August 6, 1985

Performed by:

U.S. ENVIRONMENTAL PROTECTION AGENCY
TOXIC SUBSTANCES OFFICE
230 SOUTH DEARBORN STREET
CHICAGO, ILLINOIS 60604

1 37

1-13-65

PCB COMPLIANCE INSPECTION REPORT

I. COMPANY IDENTIFICATION

Cerro Copper Products Company P.O. Box 681 (Highway 3) East St. Louis, Illinois 62202 (618) 337-6000

RESPONSIBLE OFFICIAL

Mr. Paul Tandler, Vice President, Mfg.

II. DATE OF INSPECTION

August 6, 1985

III. PARTICIPANTS

Cerro Copper Mr. Paul Tandler, V.P. Mfg. Mr. Sanford A. Silverstein, Mgr. Engineering

U.S. EPA, REGION V

Ms. Marcie J. Kleban, Environmental Protection Specialist Mr. Gregory P. Czajkowski, Environmental Scientist, (Author) 5S-P&TSB-7

IV. OBJECTIVES

The inspection was conducted to document the Company's handling, storage and disposal practices and to determine its compliance with the PCB Disposal and Marking Regulations, 40 CFR Part 761, as published in the Federal Register of May 31, 1979, and amendments.

V. COMPANY BACKGROUND

Cerro Copper Products Company was established in 1918 as Luan Metals Company. The facility in Sauget went into operation in 1928 and currently resides on 60 acres of land. The product lines include electrically refined copper and copper tubing. Raw materials consist mostly of copper scrap. The refined copper goes to brass and wire mills and some goes to the U.S. mint. The facility employs approximately 800 people.

VI. INSPECTION SUMMARY

A. Opening Conference

The inspectors met with Mr. Tandler, presented their credentials and explained the purpose of the inspection. The Notice of Inspection (Attachment A) and the TSCA Inspection Confidentiality Notice (Attachment B) were presented and explained.

B. ELECTRICAL EQUIPMENT

The facility had a total of 36 oil-filled transformers in service all of which had been tested in 1979 for PCB concentration. At the time of inspection, six transformers were between 50 and 500 ppm and the other 30 were below 50 ppm. All testing had been performed by Transformer Consultants.

The facility also had two induction heaters with 24 large low voltage PCB capacitors each and another electrical cabinet with 12 large low voltage capacitors. All capacitors were in service.

C. HYDRAULIC SYSTEMS

The tube drawing equipment at the facility used a water soluble hydraulic fluid. No PCB hydraulic fluids had ever been used. Other equipment not using the water soluble product used straight mineral oil.

D. HEAT TRANSFER SYSTEMS

The facility had no oil filled heat transfer system.

E. STORAGE

There were no PCB items in storage for disposal or reuse.

F. DISPOSAL

The facility had disposed of a total of 32 drums of PCB waste generated as a result of the retrofilling of two transformers. The retrofil was performed by S.D. Meyers and all manifests were in order.

G. RECORDKEEPING

The company did perform annual inspections on the PCB transformer prior to retrofilling and reclassification and records were maintained. There were, however, no concise annual summary documents prepared by the facility from 1978 through 1984. The company did have most of the necessary records needed to form the basis for an annual document.

H. WASTE OILS

The facility generates approximately 4-5 barrels of waste oil each month. Gateway Petroleum hauls the waste oil from the site.

I. CLOSING CONFERENCE

A copy of the suggested format for the PCB annual document was given to Mr. Tandler and the inspectors explained the report review process and the follow-up corresondence that would be sent to him.

VI. SAMPLES/PHOTOGRAPHS

No samples or photographs were taken.

| | | | | | ALLACI | ment A |
|--|--|--|---|---|--|--|
| | _ | US EN | VIRONMENTAL P WASHINGTO | PROTECTION AGENCY | | Form Approved |
| S.ED/ | 2 | T | | ES CONTROL ACT | | OMB No. 2070-0007 Approval expires 8-31-85 |
| VLI | 7 | | NOTICE OF I | NSPECTION | | |
| 1. INVESTIGA | TION IDENTIF | | 2. TIME | 3. FIRM NAME | | A |
| 8-6-85 47 | 726 | DAILY SEC NO. | 2:21 p.m | D | per | |
| 4. INSPECTOR ADDRES | | 7031 - | | 5. FIRM ADDRESS | • | |
| 2305 | . Dearton | , 55-२१ एडा | 3-16 | Highway | 3 | |
| Chica | 90, PL | 60604 | | Sauget | PL 62202 | |
| | | | REASON FO | R INSPECTION (DO | 3 Regulation Co | myllance) |
| Under the | authority of | Section 11 of the | Toxic Substance | es Control Act : | | |
| ment, facil essed or st facilities) a with their requirement conveyance | lity, or other ored, or held and any convedistribution into of the Active have been or an extended to the Active have been or an extended to the Active been of the Active been or an extended to the Active been of the Active been or an extended to the Active been of the Active be | premises in which before or after the eyance being used n commerce (inc | n chemical substa neir distribution i i to transport chi luding records, fi e chemical substa | ances or mixtures or art in commerce (including emical substances, mixt les, papers, processes, c ances, mixtures, or artic | icles containing same records, files, papers, ures, or articles conta ontrols, and facilities | n activities) an establish- are manufactured, proc- processes, controls, and ining same in connection bearing on whether the ed with such premises or |
| addition | _ | | meck appropriate | | | |
| | A. Financ | | | ☐ D. Personnel data | | |
| | B. Sales d | ata 🔀 | | E. Research data | | |
| | C. Pricipa | data | | | • | |
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| TITLE | 30 | DATES | GNED | TITLE | | DATE SIGNED |
| Environment | al Scien | trst 8-1 | 6-85 | Vice Prosin | 027 - MCE. | 0/6/85 |



US ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

TOXIC SUBSTANCES CONTROL ACT

Form Approved OMB No. 2070-0007 Approval expires 8-31-85

TSCA INSPECTION CONFIDENTIALITY NOTICE

| 1. INVESTIGATION IDENTIFICATION | 2. FIRM NAME | | |
|-------------------------------------|---|--|--|
| S-6-85 INSPECTOR NO. DAILY SEC. NO. | Cerro Copper | | |
| 3. INSPECTOR NAME | 4. FIRM ADDRESS | | |
| Greg Czajkowski | Highway 3 Sauget, PL62202 | | |
| 5. INSPECTOR ADDRESS | Source Di 62 202 | | |
| 2305. Dearborn, 55-P&T9B-16 | Sauger , 2202202 | | |
| Chicago, RL 60604 | 6. CHIEF EXECUTIVE OFFICER NAME HENRY L. Schweich | | |
| | President, Cerro Products Co. | | |

TO ASSERT A CONFIDENTIAL BUSINESS INFORMATION CLAIM

It is possible that EPA will receive public requests for release of the information obtained during inspection of the facility above. Such requests will be handled by EPA in accordance with provisions of the Freedom of Information Act (FOIA), 5 USC 552; EPA regulations issued thereunder, 40 CFR Part 2; and the Toxic Substances Control Act (TSCA), Section 14. EPA is required to make inspection data available in response to FOIA requests unless the Administrator of the dential treatment or may be withheld from release under other exceptions of FOIA.

Any or all the information collected by EPA during the inspection may be claimed confidential if it relates to trade secrets or commercial or financial matters that you consider to be confidential business information. If you assert a CBI claim, EPA will disclose the information only to the extent, and by means of the procedures set forth in the regulations (cited above) governing EPA's treatment of confidential business information. Among other things, the regulations require that EPA notify you in advance of publicity disclosing any information you have claimed as confidential business information.

A confidential business information (CBI) claim may be asserted at any time. You may assert a CBI claim prior to, during, or after the information is collected. The declaration form was developed by the Agency to assert you in asserting a CBI claim. If it is more convenient for you to assert a CBI claim on your own stationery or by marking the individual documents or samples "TSCA confidential business information," it is not necessary for you to use this form. The inspector will be glad to answer any questions you may have regarding the Agency's CBI procedures.

While you may claim any collected information or sample as confidential business information, such claims are unlikely to be upheld if they are challenged unless the information meets the following criteria:

Your company has taken measures to protect the confidentiality of the information, and it intends to continue to take such measures.

- The information is not, and has not been, reasonably obtainable
 without your company's consent by other persons (other than
 governmental bodies) by use of legitimate means (other than
 discovery based on showing of special need in a judicial or
 quasi-judicial proceeding).
- 3. The information is not publicly available elsewhere.
- Disclosure of the information would cause substantial harm to your company's competitive position.

At the completion of the inspection, you will be given a receipt for all documents, samples, and other materials collected. At that time, you may make claims that some or all of the information is confidential business information.

If you are not authorized by your company to assert a CBI claim, this notice will be sent by certified mail, along with the receipt for documents, samples, and other materials to the Chief Executive Officer of your firm within 2 days of this date. The Chief Executive Officer must return a statement specifying any information which should receive confidential treatment.

The statement from the Chief Executive Officer should be addressed

Ms. Marion Young U.S. EPA, Region V Address! See Item# 5 Above

and mailed by registered, return-receipt requested mail within 7 calendar days of receipt of this Notice. Claims may be made any time after the inspection, but inspection data will not be entered into the special security system for TSCA confidential business information until an official confidentiality claim is made. The data will be handled under the agency's routine security system unless and until a claim is made.

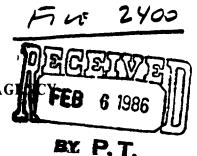
| TO BE COMPLETED BY FACILITY OFFICIAL RECEIVING THIS NOTICE: I have received and read the notice | business confidentiality claims for the firm, a copy of this Notice and other inspection materials will be sent to the company's chief executive officer. If there is another company official who should also receive this information, |
|--|--|
| SIGNATURE | please designate below. NAME |
| HAME POUL TANDLEN | TITLE |
| VILE PROSIDENT - MICK. 8/6/85 | ADDRESS |



UNITED STATES ENVIRONMENTAL PROTECTION AG

REGION 5

230 SOUTH DEARBORN ST. CHICAGO, ILLINOIS 60604



REPLY TO THE ATTENTION OF. 5S-P&TSB-7

JAN 3 1 1986

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Paul Tandler Vice President, Manufacturing Cerro Copper Products Company P.O. Box 681 (Highway 3) East St. Louis, Illinois 62202

> Re: Notice of Noncompliance Cerro Copper Products Company

Dear Mr. Tandler:

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Within thirty (30) days of receipt of this Notice of Noncompliance, Cerro Copper Products Company, must submit a certified statement that the violation has been corrected. That statement must be submitted to:

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Toxic Substances Section (5S-P&TSB-7)
U.S. Environmental Protection Agency
230 South Dearborn
Chicago, Illinois 60604

A copy of the inspection report is enclosed for your information. If you have any questions, please do not hesitate to contact Ms. Marion Young at (312) 353-2291.

Sincerely,

William H. Sanders ID William H. Sanders III, P.E.

Director, Environmental Services Division

Enclosures

2/6/86 ce. H.L. Schmach S. A. Sievalion W/ Nose Boking For Amora Proponts Bobinaine 7/4/78.

in TSCA, 15 U.S.C. Section 2601, including possible imposition of civil penalties.

William H. Sanders III, P.E.
Director, Environmental Services Division
U.S. Environmental Protection Agency
Region V

PCB ANNUAL DOCUMENT* (A SUGGESTED FORMAT)

| Removed from Service** | In Storage for Disposal | In Transport for Disposal | In Service at End of Year |
|--|-------------------------|---------------------------|--|
| Dates Quantities * PCBs/PCB Items in Containers | | | Quantities * PCBs/PCB Items in Containers |
| - Total kg ID of Contents △ Liquid △ Capacitors | | | - Total kg - ID of Contents ▲ Liquids - Capacitors |
| PCB Transformers - Total Number - Total kg of PCBs in Transformers | | | * PCB Transformers - Total Number - Total kg of PCBs in Transformers |
| PCB Capacitors - Total Number | | | * PCB Capacitors - Total Number |

^{*}A. Document required if facility is using or storing at one time:

- 1. At least 45 kg (99.4 lb) of PCBs; or
- 2. 1 or more PCB transformers; or
- 3. 50 or more PCB large capacitors.
- B. Document must be prepared by July 1 for previous calendar year.
- C. Document must cover Jan. 1 thru Dec. 31 for any calendar year.

**D. Removed from Service:

- 1. Location of initial disposal or storage facility.
- 2. Name of owner or operator of the facility.

REPORT ON INSPECTION TO DETERMINE

COMPLIANCE WITH THE PCB DISPOSAL

AND MARKING REGULATIONS

CERRO COOPER PRODUCTS COMPANY
P.O. BOX 681
EAST ST. LOUIS, ILLINOIS 62202

August 6, 1985

Performed by:

U.S. ENVIRONMENTAL PROTECTION AGENCY
TOXIC SUBSTANCES OFFICE
230 SOUTH DEARBORN STREET
CHICAGO, ILLINOIS 60604

1-17-15

PCB COMPLIANCE INSPECTION REPORT

I. COMPANY IDENTIFICATION

Cerro Copper Products Company P.O. Box 681 (Highway 3) East St. Louis, Illinois 62202 (618) 337-6000

RESPONSIBLE OFFICIAL

Mr. Paul Tandler, Vice President, Mfg.

II. DATE OF INSPECTION

August 6, 1985

III. PARTICIPANTS

Cerro Copper Mr. Paul Tandler, V.P. Mfg. Mr. Sanford A. Silverstein, Mgr. Engineering

U.S. EPA, REGION V

Ms. Marcie J. Kleban, Environmental Protection Specialist Mr. Gregory P. Czajkowski, Environmental Scientist, (Author) 5S-P&TSB-7

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The facility also had two induction heaters with 24 large low voltage PCB capacitors each and another electrical cabinet with 12 large low voltage capacitors. All capacitors were in service.

. HYDRAULIC SYSTEMS

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THE OUT OF STRUCE IN 1968 (

D. HEAT TRANSFER SYSTEMS

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H. WASTE OILS

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"C" Homos

I. CLOSING CONFERENCE

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VI. SAMPLES/PHOTOGRAPHS

No samples or photographs were taken.

| | | | | ALL | achment A |
|-------------|---|---|---|--|--|
| | | US EN | VIRONMENTAL I | PROTECTION AGENCY | Form Approved |
| | FPΛ | т | | ES CONTROL ACT | OMB No. 2070-0007 Approval expires 8-31-85 |
| | | | NOTICE OF | INSPECTION | |
| 1. | . INVESTIGATION IDENT | | 2. TIME | 3. FIRM NAME | |
| DATE 8-6 | | DAILY SEQ. NO. | 2:21 p.m | | |
| 4. INSPECT | OR ADDRESS | w - > \ | | 5. FIRM ADDRESS | |
| İ | 230 S. Dearton | n,55-9873B | 1-16 | Highway 3 Savyet, ZL 6220: | |
| <u>}</u> . | Chicago, IL | 60604 | | Sauget, RL 6220: | 2 |
| | | | REASON FO | R INSPECTION (DCB Regulation | |
| | Under the authority of | Section 11 of the | Toxic Substance | es Control Act : | · |
| S | ment, facility, or other essed or stored, or held facilities) and any conv with their distribution | premises in which before or after the reyance being used in commerce (incl at applicable to the | chemical substa eir distribution to transport ch uding records, fi | photographs, statements, and other inspendences or mixtures or articles containing sation commerce (including records, files, papernical substances, mixtures, or articles coiles, papers, processes, controls, and faciliances, mixtures, or articles within or associates, mixtures, or articles within or associates. | me are manufactured, proc- pers, processes, controls, and ontaining same in connection ties) bearing on whether the |
| | In addition, this inspec | tion extends to (C | heck appropriat | e blockst. | |
| | A. Financ | cial data | | ☐ D. Personnel data | |
| 1 | ☐ B. Sales o | iata | | E. Research data | |
| | C Brisin | | | | |
| 1 | C. Pricing | g-crata | | | |
| | The nature and extent | of inspection of s | uch data specifie | d in A through E above is as follows; | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | , | |
| | | | | \bigwedge | |
| INSPECTO | R SIGNATURE | , (| | RECIPIENT SIGNATURE | Po . |
| NAME G | reg (Zajkow | 1 . | · · · · · · · · · · · · · · · · · · · | Porc Ton de | r. , |
| ENVI | ronmental Scien | itist 8-6 | GNED 5-85 | VICE PROJECT - MEG | DATE SIGNED |



US ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

TOXIC SUBSTANCES CONTROL ACT

Form Approved OMB No. 2070-0007 Approval expires 8-31-85

TOXIC SUBSTANCES CONTROL ACT

| 1, 10 | IVESTIGATION IDEN | TIFICATION | 2. FIRM NAME | | |
|---|-------------------|----------------|---|--|--|
| DATE 8-6-85 | INSPECTOR NO. | DAILY SEQ. NO. | Cerro Copper | | |
| 3. INSPECTOR NAME | | | 4. FIRM ADDRESS | | |
| Greg Czajkowski | | | Highway 3 Sauget, DL62202 | | |
| 2305 | . Dearborn, 55 | -P & T3B -16 | | | |
| 2305. Dearbon, 55-P & T3B-16 Chicago, 2L 60604 | | | 6. CHIEF EXECUTIVE OFFICER NAME HOUTY L. Schweich | | |
| | | | 7. TITLE President, Cerro Products Co. | | |

TO ASSERT A CONFIDENTIAL BUSINESS INFORMATION CLAIM

It is possible that EPA will receive public requests for release of the information obtained during inspection of the facility above. Such requests will be handled by EPA in accordance with provisions of the Freedom of Information Act (FOIA), 5 USC 552; EPA regulations issued thereunder, 40 CFR Part 2; and the Toxic Substances Control Act (TSCA), Section 14. EPA is required to make inspection data available in response to FOIA requests unless the Administrator of the Agency determines that the data contain information entitled to confidential treatment or may be withheld from release under other exceptions of FOIA.

Any or all the information collected by EPA during the inspection may be claimed confidential if it relates to trade secrets or commercial or financial matters that you consider to be confidential business information. If you assert a CBI claim, EPA will disclose the information only to the extent, and by means of the procedures set forth in the regulations (cited above) governing EPA's treatment of confidential business information. Among other things, the regulations require that EPA notify you in advance of publicly disclosing any information you have claimed as confidential business information.

A confidential business information (CBI) claim may be asserted at any time. You may assert a CBI claim prior to, during, or after the information is collected. The declaration form was developed by the Agency to assist you in asserting a CBI claim. If it is more convenient for you to assert a CBI claim on your own stationery or by marking the individual documents or samples "TSCA confidential business information," it is not necessary for you to use this form. The inspector will be glad to answer any questions you may have regarding the Agency's CBI procedures.

While you may claim any collected information or sample as confidential business information, such claims are unlikely to be upheld if they are challenged unless the information meets the following criteria:

Your company has taken measures to protect the confidentiality of the information, and it intends to continue to take such measures.

- The information is not, and has not been, reasonably obtainable without your company's consent by other persons (other than governmental bodies) by use of legitimate means (other than discovery based on showing of special need in a judicial or quasi-judicial proceeding).
- 3. The information is not publicly available elsewhere.
- Disclosure of the information would cause substantial harm to your company's competitive position.

At the completion of the inspection, you will be given a receipt for all documents, samples, and other materials collected. At that time, you may make claims that some or all of the information is confidential business information.

If you are not authorized by your company to assert a CBI claim, this notice will be sent by certified meil, along with the receipt for documents, samples, and other materials to the Chief Executive Officer of your firm within 2 days of this date. The Chief Executive Officer must return a statement specifying any information which should receive confidential treatment.

The statement from the Chief Executive Officer should be addressed

Ms. Marion Young U.S. EPA, Region V Address! See Item* 5 Above

and mailed by registered, return-receipt requested mail within 7 calendar days of receipt of this Notice. Claims may be made any time after the inspection, but inspection data will not be entered into the special security system for TSCA confidential business information until an official confidentiality claim is made. The data will be handled under the agency's routine security system unless and until a claim is made.

| TO BE COMPLETED BY FACILITY OFFICIAL RECEIVING THIS NOTICE: I have received and read the notice | If there is no one on the premises of the facility who is authorized to make business confidentiality claims for the firm, a copy of this Notice and other inspection materials will be sent to the company's chief executive officer. If there is another company official who should also receive this information, please designate below. |
|--|---|
| SIGNATURE | NAME |
| Pour Tordien | TITLE |
| VICE PROSIDENT - MIT. 8/6/85 | ADDRESS |

CERRO COPPER PRODUCTS CO.

A member of The Marmon Group of companies

INTERNAL MEMORANDUM

OTHER ADDRESSEES . FOR INFORMATION

cc: H. L. Schweich

J. Matcuk

File 1000

HQ-10

SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

n Paul Tandler i

DATE: August 12, 1985

FROM: Sandy Silverstein

SUBJECT: EPA Visit - PCB's

On Tuesday afternoon, August 6, we were visited by Marcie Kleban and Greg Czajkowski of the U.S. EPA. We had been previously advised that they were coming on a routine visit involving their area of responsibility which is the use, storage and disposal of PCB's.

After obtaining general information regarding the history and operations of this plant, they inquired of equipment that we used or stored which was known or suspected to contain PCB's. They were shown our transformer log which contains detailed information on each transformer in our plant including annual inspections and testings for PCB content. They were also shown in this log documentation which was evident of last year's processing whereby two transformers that contained PCB's were detoxified and reclassified by Transformer Consultants Company. They were satisfied that this information met all of the record keeping requirements.

They then inquired of our use of capacitors and were advised that the only capacitors in this plant were those installed on the induction heaters at the Extrusion Press and we did not believe they were "large" capacitors. We were given a copy of the EPA's definition of "large" capacitors and after checking the size of the capacitors at the induction heaters, it was agreed that those capacitors met this designation. We were given a copy of a suggested form used for record keeping of capacitors and we told them that we would establish a log in conformance with that sample and institute a program of regular inspection and recordings of same. They commented that they did not consider our failure to have a record of these capacitors to be a matter of serious concern.

They also inquired of our hydraulic systems which include reservoirs of 30-gallon capacity or more. We informed them that we had a large number of such systems and all systems were filled with either a water-oil emulsion or straight mineral hydraulic oil, therefore, no PCB's would be involved in these systems.

We invited them to be conducted into the plant to view any of the transformers or capacitors but they declined, stating that the information that they had been supplied was sufficient.

SAS/jpl

| 1 | | Indler/ | |
|------|--|--------------------------------------|-------------------|
| | WHILE YOU | J WERE OU z <i>aj kowski</i> a | } |
| | TELEPHONED | PLEASE CALL | X |
| 1 | CALLED TO SEE YOU | WILL CALL AGAIN | |
| | WANTS TO SEE YOU | URGENT | |
| | RETURNED | YOUR CALL | - |
| Mari | Message Will 8/5-9 Messag | Oper U. BUSINESS SUPPLY CENTER: | 5, INC. 7-9933 |

· · ·

US ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460

Form Approved

| | HPΔ | т | OXIC SUBSTANCI | ES CONTROL ACT | OMB No. 2070-0007 Approval expires 8-31-85 |
|-----------|---|---|---|---|--|
| | | | NOTICE OF I | NSPECTION | |
| | 1. INVESTIGATION IDENT | | 2. TIME | 3. FIRM NAME | |
| DATE | 1NSPECTOR NO. | DAILY SEQ. NO. | 27. 28.30 | Corra Consor | |
| 4. INSPEC | TOR ADDRESS | <u> </u> | 1 | 5. FIRM ADDRESS | |
| | 230 S. Dearbe | m 55.21 TS | R-16 | Highway 3 | |
| | Calcom, EL | | n + 19 | Sauget, EL. | 62242 |
| | | | · | | |
| | II to all a configuration of | (Oa) 44 -£ab | | R INSPECTION (PCB Regu | latton Compliance) |
| | Under the authority of | Section 11 of the | I oxic Substance | es Control Act : | |
| | ment, facility, or other essed or stored, or held facilities) and any con- with their distribution | premises in which thefore or after the veyance being used in commerce (included the applicable to the | n chemical substa neir distribution I to transport ch luding records, fi | ances or mixtures or articles conta in commerce (including records, fi emical substances, mixtures, or ar les, papers, processes, controls, ar | er inspection activities) an establish- ining same are manufactured, proc- iles, papers, processes, controls, and ticles containing same in connection and facilities) bearing on whether the or associated with such premises or |
| | In addition, this inspec | ction extends to /C | Check appropriat | e blocks); | |
| | A. Einan | cial data | | D. Personnel data | |
| | ☐ B. Sales | data | | ☐ E. Research data | |
| | ☐ C. Pricin | g deta | | | |
| | | | | | |
| | | | | | |
| INSPECTO | OR SIGNATURE | ······································ | | RECIPIENT SIGNATURE | |
| NAME | in Caribon | , | | NAME | -2C= |
| TAME (| Trey (Zalkow | | | Pare Tan | y with |
| TITLE | vironmental Scie | ntist 8- | 6-85 | V 20 Reduce 7- | A 1997 SIGNED |



US ENVIRONMENTAL PROTECTION AGENCY **WASHINGTON, DC 20460**

TOXIC SUBSTANCES CONTROL ACT

Form Approved
OMB No. 2070-0007
Approval expires 8-31-85

TSCA INSPECTION CONFIDENTIALITY NOTICE

| 1. IN | VESTIGATION IDEN | TIFICATION | 2. FIRM NAME | | |
|---|------------------|----------------|--|--|--|
| DATE 5-6-85 | H7726 | DAILY SEQ. NO. | Cerro Copper | | |
| 3. INSPECTOR NAME | | | 4. FIRM ADDRESS | | |
| STEGCE | ajkowski ss | | Highway 3 Sauget, ILG2202 | | |
| 2305 | . Dearbon, 55 | -P &TSB - 16 | | | |
| 2305. Dearbon, 55-P & T58-16 Chicago, RL 60604 | | | Houry L. Schweich | | |
| | | | 7. TITLE Prosident, Corro Products Co. | | |

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If you are not authorized by your company to assert a CBI claim, this notice will be sent by certified mail, along with the receipt for documents, samples, and other materials to the Chief Executive Officer of your firm within 2 days of this date. The Chief Executive Officer must return a statement specifying any information which should receive confidential treatment.

The statement from the Chief Executive Officer should be addressed

Ms. Marion Young U.S. EPA, Region V Address: See Item# 5 Above

and mailed by registered, return-receipt requested mail within 7 calendar days of receipt of this Notice. Claims may be made any time after the inspection, but inspection data will not be entered into the special security system for TSCA confidential business information until an official confidentiality claim is made. The data will be handled under the agency's routine security system unless and until a claim is

| TO BE COMPLETED BY FACILITY OFFICIAL F | RECEIVING THIS NOTICE: | If there is no one on the premises of the facility who is authorized to make business confidentiality claims for the firm, a copy of this Notice and other inspection materials will be sent to the company's chief executive officer. If there is another company official who should also receive this information, please designate below. |
|--|------------------------|---|
| SIGNATURE | 9 | NAME |
| NAME POUL TANDLES | ٠. | TITLE |
| VICE PROJECT - Mit. | SIGNED | ADDRESS |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

230 SOUTH DEARBORN ST. CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF: 5S-P&TSB-16

JUL 2 9 1985

Mr. Paul Tandler Vice President, Manufacturing CERRO Copper P.O. Box 681 East St. Louis, Illinois 62202

Dear Mr. Tandler:

The U.S. Environmental Protection Agency (U.S. EPA) is engaged in a nation-wide program of inspections to determine compliance with the final Rule for Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions. These regulations are set forth in 40 CFR 761 (Federal Register, May 31, 1979, pp. 31514-68 and amended by the Federal Register of August 25, 1982).

Section 11 of the Toxic Substances Control Act (TSCA, 15 USC 2601 et seq.) provides the authority for inspections in administering the PCB Regulations.

It is our understanding that your company possibly handles or has handled PCBs in its operations which are defined to include PCB chemical substances, PCB mixtures, PCB articles, PCB equipment, PCB containers, etc. Inspectors Greg Czajkowski and Marcie Kleban will meet with you on Tuesday, August 6, 1985, at approximately 2:00 p.m. to inspect your facility. If you have any questions, please call me at (312) 353-2291.

Sincerely,

John Connell, Chief

John Count

PCB Unit

Toxic Substances Section

CC H.L. Schwerell

S. A. Sieventine - Win Homore

B.0770Py

Other Addressees

P. Tandler

J. Burroughs

J. Hintz

M. McNerney

R. Thompson

Date: September 23, 1989

File

CERRO COPPER PRODUCTS CO.

INTERNAL MEMORANDUM

To: R. E. Conreaux

From: J. M. Grana

Subject: PCB Transformer Status

Attached is a PCB summary of transformers at Cerro.

All transformers were tested for PCB's in May 1989, five (5) were found to be PCB contaminated, PCB concentration greater than 50 ppm. Those five transformers were retrofilled by August 23, 1989. Consequently, none of Cerro's transformers are to be considered "PCB Contaminated". We should make sure that the transformers have the orange PCB label removed and the green Non-PCB label affixed. I also recommend that we retest in 1990 the 5 transformers which were retrofilled to assure all residual PCB's have been removed and that we have a record test showing non-PCB.

The Transformer Consultants May 1989 Service Report indicates there are 5 leaking transforms, Nos. 4, 8, 10, 12 and 19. We should make sure these leaks are repaired when possible. Note that No. 12 was a PCB transformer and any material contaminated by the oil must be handled as PCB contaminated debris and should be handled and disposed of accordingly.

C01422

CERRO COPPER PRODUCTS TRANSFORMER STATUS SEPTEMBER 1989

| # | Substation Name | Size KVA | Gallons | PCB's ppm | Test Date | Class |
|----|--------------------|-------------|---------|--------------|--------------|------------------|
| 4 | Foundry | 2000 | 372 | ND | 5/2/89 | Non-PCB |
| 8 | Bldg. 80 | 1000 | 470 | 27 | 5/2/89 | Non-PCB |
| 9 | New Receiving | 1500 | 319 | 16 | 5/2/89 | Non-PCB |
| 10 | R1A | 3440 | 1677 | 21 | 5/2/89 | Non-PCB |
| 11 | R1A Switch Comp. | | 437 | 15 | 5/2/89 | Non-PCB |
| 12 | R1B | 315 | 360 | 200 | 5/2/89 | Contaminated (1) |
| 13 | R1C Spare | 2000 | 340 | 127 | 5/2/89 | Contaminated (1) |
| 14 | Foundry | 1500 | 297 | 161 | 5/2/89 | Contaminated (1) |
| 18 | Foundry Air Poll. | 2500 | 443 | 36 | 5/2/89 | Non-PCB |
| 19 | Shipping | 1000 | 413 | 36 | 5/2/89 | Non-PCB |
| 24 | #2 Mill | 100 | 88 | 16 | 5/2/89 | Non-PCB |
| 25 | #2 Mill | 100 | 88 | 18 | 5/2/89 | Non-PCB |
| 26 | #2 Mill | 100 | 88 | 16 | 5/2/89 | Non-PCB |
| 30 | Extrusion Bay | 3750 | 776 | 97 | 5/2/89 | Contaminated (1) |
| 31 | Extrusion Bay | 500 | 188 | 19 | 5/2/89 | Non-PCB |
| 32 | Extrusion Bay | 500 | 188 | 20 | 5/2/89 | Non-PCB |
| 33 | Extrusion Bay | 500 | 188 | 20 | 5/2/89 | Non-PCB |
| 34 | Bldg. 80 | 2500 | 521 | 156 | 5/2/89 | Contaminated (1) |
| 35 | Main Mill | 1500 | 294 | 24 | 5/2/89 | Non-PCB |
| 36 | #2 Mill | 2500 | 389 | 18 | 5/2/89 | Non-PCB |
| 37 | Bldg. 80 | 300 | 145 | ND | 5/2/89 | Non-PCB |
| 38 | Extrusion Bay | 1500 | 213 | ND | 5/2/89 | Non-PCB |
| 39 | Bldg. 19 | 2500 | 339 | ND | 5/2/89 | Non-PCB |
| 40 | Extrusion Press | 2500 | 256 | ND | 5/2/89 | Non-PCB |

⁽¹⁾⁻Retrofilled transformers on 8/23/89. Should be retested in 1990.

Other Addressees

CERRO COPPER PRODUCTS CO.

INTERNAL MEMORANDUM

To: File

Date:October 2, 1989

From: J. M. Grana

Subject: PCB Capacitors

Roy Thompson called to tell me today that we have 65 PCB capacitors on the Ajax Heaters for the Extrusion Press Billet Furnace.

C01423

TRANSFORMER CONSULTANTS

P 8 80X 4724, ARRON OH 44910 A DIVISION OF S.D. MYERS INC. CUST CERRO COPPER PRODUCTS CITY E ST LOUIS IL 0 # 97320000 DATE PRINTED SUB NAME FOUNDRY UNIT # 1306 CUTDCOR/GROUND OTHER LOCATION

| | NAM | EPLATE DATA | h Mhaidhin dhilliadh dar Ta bial Mariadh Arraidh Mhaidh Mhaidh Air an Air an Air an Air an Air an Air an Air a An Aireann an Aireann | ••• | | EQUIPMENT | |
|------|--------------|-------------|---|-------------------------|----------------|--------------|----------------|
| MFG. | WESTINGHOUSE | EQUIP. TYPE | TRANSFORMER | RADIATORS | YE5 | CONSERVATORS | NO |
| DATE | MFG. | TRANS CLASS | DA | FANS | 40 | LTC COMP | 10H |
| S/N | PAV841701 | IMPEDANCE | 5.60% | H ₇ O COOLED | N 0 | BUSHING LOC | TOP & SIDE END |
| KVA | 2,000 | PHASE/CYCLE | 3/60 | OIL PUMPS | MQ | HOSE LENGTH | 100 FEET |
| PRI | 13,800 | LIQUID TYPE | 91L | TOP FPV | 1.00 IN | ENERGIZED | YES |
| SEC | 480 | GAL LIQUID | 372 | BOTTOM FPV | 1.00 IN | POWER V/A | 400/30 |
| | | | | OTHER ACCECC | TOP INSPECTION | IN PLATE | |

VISUAL INSPECTION

PAINT CONDITION FAIR

LEAKS

YES/SECONDARY BUSHING

FIELD SERVICE

LIQUID SCREEN TEST DATA

| DATE | SERVICE | LEVEL | TEMP | P/V | ACID | | IFT | | DIE | L | COLOR | SP. GR | | VISUAL | | SEDIMEN | T |
|-------|---------|--------|------|-----|-------|----|------|----|-----|-----|--------|--------|----|--------|-------|---------|---|
| 9/00/ | 81 | | | | . 030 | AC | 36.4 | AC | 45 | AC | 0.50 A | 0.880 | AC | CLEAR | AC | NOME | A |
| 6/00/ | 82 | | | | .030 | AC | 36.8 | AC | 39 | AC | 0.50 A | 0.880 | AC | CLEAR | AC | NONE | A |
| 4/27/ | 83 | LOW | 40 C | 1.0 | .030 | AC | 34.3 | AC | 33 | AC | 0.75 A | 0.880 | AC | CLEAR | AC | HONE | A |
| 5/14/ | 84 | LOW | 58 C | 0.0 | .030 | AC | 34.6 | AC | 42 | AC | 1.80 A | 0.880 | AC | CLEAR | AC | HONE | A |
| 7/16/ | 85 | LOW | 40 C | 2.0 | .040 | AC | 33.9 | AC | 48 | AC | 0.75 A | 0.900 | AC | CLEAR | AC | NONE | A |
| 7/07/ | 86 | | | | . 050 | AC | 35.1 | AC | 48 | AC. | 0.50 A | 0.890 | AC | CLEAR | AC 3A | NONE | A |
| 5/27/ | 87 | LOW | 40 C | 2.0 | .050 | AC | 34.0 | AC | 44 | AC | 0.50 A | 0.890 | AC | CLEAR | AC | NONE | A |
| 9/08/ | 87 | | | | .020 | AC | 40.7 | AC | 47 | AC | 0.50 A | 0.840 | AC | CLEAR | AC | NONE | A |
| 5/04/ | 88 | NORHAL | 38 C | 1.0 | .010 | AC | 38.1 | AC | 40 | AC | 0.50 A | 0.870 | AC | CLEAR | AC | HOHE | A |
| 5/11/ | 89 | NORKAL | 40 C | 0.5 | . 020 | AC | 40.2 | AC | 49 | AC | 0.50 A | 0.865 | AC | CLEAR | AC | NONE | A |
| | | | | | | | | | | | | | | | | | |

COMMENTS TRANSFORMER LIQUID TEST DATA ACCEPTABLE IN ALL CATEGORIES.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|---------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| 10/04/80 | | ND | 8500 | 68403 | 16 | 1245 | 11202 | 3 | 6 | ND | 1270 | 89375 |
| 9/09/81 | | ND | 7693 | 66710 | 11 | 1136 | 9687 | 3 | 9 | ND | 1159 | 85249 |
| 6107182 | | ND | 14015 | 64688 | OM | 374 | 3423 | ND | ND | . ND | 374 | 82500 |
| 5/02/83 | | 8 | 4567 | 71344 | TRACE | 1515 | 12282 | 3 | 16 | NO | 1542 | 89735 |
| 5/14/84 | | ND | 14610 | 57979 | 9 | 439 | 6702 | 5 | 9 | 140 | 459 | 79750 |
| 7/16/85 | | TRACE | 3395 | 67880 | TRACE | 1403 | 10596 | 3 | 8 | ND | 1414 | 83285 |
| 7107186 | | 16 | 3172 | 52320 | 11 | 1052 | 8042 | 8 | 3 | ND | 1090 | 64624 |
| 5/27/87 | | ND | 5464 | 70443 | 19 | 1373 | 9122 | 3 | 5 | DM | 1400 | 86429 |
| 5/04/88 | | ND | 22329 | 64209 | 3 | 202 | 4007 | TRACE | TRACE | ND | 205 | 90750 |
| 5/11/89 | | 18 | 27753 | 71771 | 9 | 296 | 4646 | 5 | 2 | ND | 330 | 104500 |

RECOMMENDATION * COMMENTS

* B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME. RETEST 1 YEAR

CUST CERRO COPPER PRODUCTS

SUB NAME BLDG 30

P 0 30% 4734 HKR0%, OH 44310

OTHER

9003

5/14/89

ADDITIONAL EQUIPMENT NAMEPLATE DATA WESTINGHOUSE TRANSFORMER YES MFG. EQUIP. TYPE RADIATORS CONSERVATORS NO NO 19/53 DA DATE MFG. FANS TRANS CLASS LTC COMP 6531247 6.30% NO TOP S/N IMPEDANCE H₂O COOLED **BUSHING LOC** 100 FEET 1,000 3/60 NO KVA PHASE/CYCLE OIL PUMPS HOSE LENGTH 13,800 OIL 1.00 IN PRI LIQUID TYPE TOP FPV ENERGIZED 47) 400/30 480 1.00 IN SEC GAL LIQUID **BOTTOM FPV** POWER V/A TOP INSPECTION PLATE

VISUAL INSPECTION

PAINT CONDITION FAIR

LEAKS

E ST LOUIS IL

308

UNIT #

YES/TFPU

FIELD SERVICE

ID # 07320000 CATE PRINTED

LOCATION

OTHER ACCESS

DUTOOCR/GROUND

LIQUID SCREEN TEST DATA

| DATE S | ERVICE | LEVEL | TEMP | P/V | ACID | | IFT | | DIE | _ | COLOR | SP. GR | | VISUAL | | SEDIMENT | |
|-------------------|--------|--------|------|-----|-------|----|------|----|-----|----|--------|---------|----|--------|----|----------|-----|
| . 9 /00/80 | | | | | . 040 | AC | 32.5 | AC | 40 | AC | 2.00 A | C 0.880 | AC | CLEAR | AC | NONE | ı |
| 9/00/81 | | | | | . 030 | AC | 37.5 | AC | 35 | AC | 1.00 A | C 0.880 | AC | CLEAR | AC | NONE | 1 |
| 6/00/82 | | | | | . 040 | AC | 35.7 | AC | 42 | AC | 1.00 A | C 0.880 | AC | CLEAR | AC | NONE | 1 |
| 4/27/83 | | NORMAL | 34 C | 4.5 | . 040 | AC | 33.8 | AC | 37 | AC | 1.00 A | C 0.880 | AC | CLEAR | AC | NONE | |
| 5/14/84 | | NORHAL | 28 C | 4.5 | . 040 | AC | 33.4 | AC | 44 | AC | 1.50 A | C 0.880 | AC | CLEAR | AC | NONE | 1 |
| 7/16/85 | | NORMAL | 40 C | 4.5 | . 030 | AC | 33.8 | AC | 39 | AC | 1.50 A | C 0.890 | AC | CLEAR | AC | NONE | - (|
| 7/07/86 | | NORMAL | 48 C | 4.5 | .030 | AC | 34.0 | AC | 31 | AC | 1.00 A | C 0.880 | AC | CLEAR | AC | NONE | |
| 5/27/87 | | NORMAL | 45 C | 4.5 | . 030 | AC | 33.B | AC | 41 | AC | 0.75 A | C 0.880 | AC | CLEAR | AC | NONE | 1 |
| 5/04/88 | | NORMAL | 31 C | 4.5 | . 030 | AC | 32.3 | AC | 37 | AC | 1.00 A | C 0.880 | AC | CLEAR | AC | NONE | 1 |
| 5/11/89 | | NORMAL | 30 C | | 0E0. | AC | 33.7 | AC | 45 | AC | 1.00 A | C 0.880 | AC | CLEAR | AC | NONE | , |

COMMENTS TRANSFORMER LIQUID TEST DATA ACCEPTABLE IN ALL CATEGORIES.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|---------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| 10/05/80 | | ND | 4646 | 77699 | 38 | 189 | 1970 | 55 | 50 | סא | 305 | 84617 |
| 9/09/81 | | ND | 3336 | 71467 | 42 | 184 | 1899 | 52 | 21 | NO | 299 | 77001 |
| 6/07/82 | | OM | 10273 | 56707 | 19 | 83 | 1030 | 35 | 11 | NO | 148 | 78158 |
| 5/02/83 | | ND | 3194 | 67887 | 46 | 205 | 1920 | 60 | 21 | NO | 332 | 73333 |
| 5/14/84 | | DM | 17809 | 61566 | 29 | 64 | 1582 | 54 | 21 | ND | 168 | 91125 |
| 7/16/85 | | TRACE | 1347 | 86680 | 61 | 226 | 2321 | 78 | 37 | ND | 402 | 90750 |
| 7/07/84 | | TRACE | 3647 | 69286 | 50 | 173 | 2011 | 62 | 34 | NO | 319 | 75263 |
| 5/27/87 | | ND | 1844 | 64929 | 51 | 182 | 2049 | 68 | 19 | ND | 320 | 69142 |
| 5/04/88 | | TRACE | 17863 | 67250 | TRACE | TRACE | 134 | 3 | TRACE | NO | 3 | 85250 |
| 5/11/89 | | 4 | 2671 | 79958 | 63 | 214 | 2232 | 87 | 55 | ND | 390 | 85251 |

NOITEDNAMMODER * COMMENT

B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME. RETEST 1 YEAR

CUST CERRO COPPER PRODUCTS

SUB NAME NEW RECEIVING

2 0 50% 4784 AXAON OH 34611

0009

6/14/87

NAMEPLATE DATA **ADDITIONAL EQUIPMENT** WESTINGHOUSE TRANSFURMER 7E5 MFG EQUIP TYPE RADIATORS CONSERVATORS ŪΑ 40 NO DATE MFG TRANS CLASS FANS LTC COMP 5.30% PAV113101 NO SIDE ENCLOSED S/N IMPEDANCE H₂0 COOLED **BUSHING LOC** 1,500 3/60 NŪ 50 FEET KVA PHASE/CYCLE OIL PUMPS HOSE LENGTH 13,300 GIL YES PRI LIQUID TYPE TOP FPV **ENERGIZED** 480 319 1 00 IN 400/30 SEC **GAL LIQUID BOTTOM FPV** POWER V/A

OTHER 1" TOP PLUG

VISUAL INSPECTION

PAINT CONDITION FAIR

LEAKS

E ET LOUIS IL

1029

MONE

FIELD SERVICE

7/88 HOCS

PCB CONTENT / EXPRESSED IN PPM

DATE PRINTED

LOCATION

03TOODR/GROUND

OTHER ACCESS

LIQUID SCREEN TEST DATA

| DATE | SERVICE | LEVEL | TEMP | P/V | ACID | | IFT | | DIEL | L | COLOR | | SP. GR. | | VISUAL | | SEDIMENT | |
|---------|---------|--------|------|------|-------|----|------|----|------|----|-------|----|---------|----|--------|-----|----------|----|
| 9/00/81 | | | | | . 040 | AC | 35.5 | AC | 40 | AC | 0.50 | AC | 0.880 | AC | CLEAR | AC | NONE | AC |
| 6/00/82 | | | | | . 040 | AC | 37.4 | AC | 48 | AC | 0.50 | AC | 0.880 | AC | CLEAR | AC | NONE | AC |
| 4/27/83 | | LOW | 29 C | 0.2 | . 030 | AC | 34.6 | AC | 32 | AC | 0.50 | AC | 0.880 | AC | CLEAR | AC | NONE | AC |
| 5/14/84 | | NORNAL | 55 C | 0.7 | . 020 | AC | 34.4 | AC | 43 | AC | 0.50 | AC | 0.880 | AC | CLEAR | AC | NONE | AC |
| 7/16/85 | | NORMAL | 45 C | 1.0 | .030 | AC | 34.1 | AC | 46 | AC | 0.75 | AC | 0.900 | AC | CLEAR | AC | NONE | AC |
| 7/07/86 | | NORMAL | 35 C | 0.0 | .040 | AC | 33.1 | AC | 39 | AC | 0.75 | AC | 0.890 | AC | CLEAR | AC | NONE | AC |
| 5/27/87 | | NORMAL | 43 C | 1.0 | .050 | AC | 34.1 | AC | 47 | AC | 1.00 | AC | 0.870 | AC | CLEAR | AC | NONE | AC |
| 5/04/88 | | NORMAL | 55 C | 1.0- | . 040 | AC | 30.8 | QU | 42 | AC | 0.75 | AC | 0.890 | AC | CLEAR | AC | NONE | AC |
| 7/09/88 | PROOF | | | | . 020 | AC | 43.7 | AC | 42 | AC | 1.50 | AC | 0.880 | AC | CLEAR | AC | NONE | AC |
| 5/11/89 | | NORMAL | 20 C | 3.0- | . 020 | AC | 41.7 | AC | 50 | AC | 1.50 | AC | 0.880 | AC | CLEAR | AC. | NONE | AC |

COMMENTS TRANSFORMER LIQUID TEST DATA ACCEPTABLE IN ALL CATEGORIES.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|---------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| 10/06/80 | | TRACE | 16158 | 68049 | 6 | 446 | 3321 | 1 | 18 | ND | 471 | 87999 |
| 9/09/31 | | NO | 15138 | 64199 | HD | 348 | 2797 | ОM | 18 | ОИ | 366 | 82500 |
| 6/07/82 | | DM | 14215 | 62126 | ND | 310 | 5308 | ND | 15 | ND | 325 | 78974 |
| 5/02/83 | | TRACE | 13061 | 63500 | 5 | 424 | 2597 | 1 | 19 | ND | 449 | 79607 |
| 5/14/84 | | ПD | 19555 | 60024 | TRACE | 234 | 2660 | 1 | 26 | ND | 261 | 82500 |
| 7/16/85 | | 25 | 6478 | 58782 | 6 | 524 | 3306 | 1 | 21 | ND | 577 | 69143 |
| 7/07/86 | | 41 | 7005 | 62334 | 7 | 726 | 4104 | 1 | 33 | ИD | 808 | 74251 |
| 5/27/87 | | 29 | 6312 | 62928 | 7 | 696 | 3839 | 1 | 44 | OM | 777 | 73856 |
| 5/04/88 | | 11 | 5428 | 64438 | 9 | 601 | 3722 | 3 | 39 | ND | 663 | 74251 |
| 5/11/89 | | 34 | 16038 | 67280 | 4 | 243 | 1646 | 1 | 4 | МО | 286 | 85250 |

RECOMMENDATION * COMMENTS

RETEST 1 YEAR

- * YK IT APPEARS THAT THIS SAMPLE WAS INADVERTENTLY CONTAMINATED WITH A SMALL AMOUNT OF AIR EITHER WHEN THE
- * SAMPLE WAS OBTAINED OR WHEN IT WAS DEGASSED. HOWEVER, BASED ON THE PAST HISTORY OF THIS UNIT AND OUR BEST
- JUDGEMENT, WE FEEL THAT THIS UNIT IS STABLE AT THIS TIME.

9.0 EOX 4724, (KAOH, 3H 4431)

0010

6/14/39

CUST CERRO COPPER PRODUCTS CITY E ST LOUIS IL SUB NAME RIA # 1013

10 # 07320000 DATE PRINTED CUTDOOR/GROUND LOCATION

| . 1444 | ستساحك مستامت | NAMEPLATE DATA | Processing and Control of the Contro | · · · · · · · · · · · · · · · · · · · | ADDITIONA | L EQUIPMENT | • |
|----------------------------|---------------|--|--|---|----------------------------------|--|---|
| MFG. DATE S/N KVA | AC | EQUIP TYPE TRANS CLASS IMPEDANCE PHASE/CYCLE | TRANSFORMER OA 7.70% 3/60 OIL | RADIATORS FANS H-0 COOLED OIL PUMPS TOP FPV | YE5 NO NO NO 1.00 IN | CONSERVATORS LTC COMP BUSHING LOC HOSE LENGTH | NO YES SIDE 150 FEET YES |
| PRI SEC | 240 | LIQUID TYPE GAL LIQUID | 1,677 | BOTTOM FPV OTHER ACCESS | 2.00 IN | ENERGIZED POWER V/A ION PLATE | 400/40 |

VISUAL INSPECTION

PAINT CONDITION BAD

LEAKS

YES/BFPU

FIELD SERVICE

6/73 RE-REFINE

7/83 RE-REFINE

LIQUID SCREEN TEST DATA

| , DATE | SERVICE | LEVEL | TEMP | P/V | ACID | | IFT | | DIEL | • | COLOR | | SP. GR. | | VISUAL | | SEDIMENT |
|---------|----------|--------|------|-----|-------|-----|------|----|------|----|-------|----|---------|----|--------|----|----------|
| 9/00/81 | • | | | | . 050 | AC | 34.5 | AC | 50 | AC | 2.50 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 6100182 | 2 | | | | . 060 | อูบ | 33.2 | AC | 46 | AC | 2.50 | AC | 0.880 | AC | CLEAR | AC | HONE |
| 4/27/83 | ì | NORMAL | 54 C | 0.0 | .040 | ยูบ | 32.1 | AC | 36 | AC | 2.50 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 7/14/83 | 3 | NORMAL | | | . 020 | AC | 43.8 | AC | 45 | AC | 2.00 | UN | 0.890 | AC | CLEAR | AC | NONE |
| 5/14/84 | l | NORMAL | 50 C | 0.0 | . 040 | AC | 40.1 | AC | 44 | 3A | 1.50 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 7/16/85 | i | NORMAL | 55 C | 0.0 | .020 | AC | 39.0 | AC | 41 | AC | 2.00 | AC | 0.890 | AC | CLEAR | AC | NONE |
| 7/07/86 | • | NORMAL | 62 C | 0.0 | . 030 | AC | 36.4 | AC | 39 | AC | 2.00 | AC | 0.885 | AC | CLEAR | AC | NONE |
| 5/27/87 | ? | NORMAL | 60 C | 0.0 | . 040 | AC | 36.9 | AC | 44 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 5/04/88 |) | NORMAL | 50 C | 0.0 | . 040 | AC | 34.1 | AC | 39 | AC | 2.50 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 5/11/89 |) | LOW | 25 C | 0.0 | .040 | AC | 35.3 | AC | 49 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE |

COMMENTS TRANSFORMER OIL TEST DATA ACCEPTABLE, HOWEVER STUDIES INDICATE OXIDATION BY-PRODUCTS TRAPPED IN INSULATION.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|---------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| 10/05/80 | | ND | 26893 | 67415 | ND | 83 | 3686 | ND | 32 | ON | 115 | 99109 |
| 9/09/81 | | ND | 24220 | 59948 | ND | 48 | 2583 | CM | 23 | ND | 91 | 86842 |
| 6107182 | | ДN | 26616 | 62450 | GH | 57 | 2038 | מא | 23 | ND | 80 | 91184 |
| 5/02/83 | | ND | 24987 | 62742 | ND | 4 | 1443 | ОИ | 14 | HO | 18 | 89190 |
| 5/14/84 | | 5 | 24583 | 51555 | ND | NO | 855 | NO | 1 | פא | 6 | 76999 |
| 7/16/85 | | ND | 29460 | 71567 | TRACE | 103 | 2578 | TRACE | 5 | MD | 108 | 103713 |
| 7107186 | | OM | 21794 | 52786 | TRACE | 37 | 2322 | TRACE | 11 | ND | 98 | 77000 |
| 5/27/87 | | DM | 21309 | 54033 | 1 | 60 | 1585 | ИО | 12 | ИD | 73 | 77000 |
| 5/04/88 | | ND | 23208 | 55319 | 1 | 30 | 1184 | ND | 9 | ND | 49 | 79751 |
| 5/11/99 | | 25 | 29117 | 67642 | 3 | 78 | 2123 | 2 | 10 | ND | 118 | 99000 |

RECOMMENDATION * COMMENTS

RETEST 1 YEAR

* B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME.

9 0. 30% 4784 AKREN, GH 4431.

001:

CUST CERRO COPPER PRODUCTS

SUB NAME ALA SWITCH COMP.

E ST LOUIS IL CITY

UNIT#

OTHER TC 710 ID# 07320000 DATE PRINTED

LOCATION

GUTDOGR/GROUND

6:14/87

240/40

| IAMEPLATE DATA | | ADD | DITIONAL EQUIPMENT |
|----------------|-------------|---------|--------------------|
| FOLUE TYPE | TAP CHANGER | PARIAMA | CONCERVATORS |

АC 125 MFG. CONSERVATORS DATE MFG. TRANS CLASS FANS LTC COMP 3232349 S/N IMPEDANCE H-D COOLED BUSHING LOC 150 FEET KVA PHASE/CYCLE OIL PUMPS HOSE LENGTH CIL 1.00 IN YES LIQUID TYPE PRI TOP FPV **ENERGIZED**

437 1.09 IN BOTTOM FPV SEC **GAL LIQUID** POWER V/A TOP INSPECTION PLATE OTHER ACCESS

VISUAL INSPECTION

PAINT CONDITION

LEAKS

BAD

NONE

FIELD SERVICE

LIQUID SCREEN TEST DATA

| .DATE | SERVICE | LEVEL. | TEMP | P/V | ACID | | IFT | | DIEL | | COLOR | SP. GR. | | VISUAL | | SEDIMENT | |
|--------|---------|--------|------|-----|-------|----|------|----|------|----|---------|---------|----|--------|----|----------|---|
| 9/00/8 | 0 | | | | .070 | AC | 25.4 | AC | 33 | AC | 2.00 AC | 0.890 | AC | CLEAR | AC | NONE | A |
| 910018 | 1 | | | | .100 | AC | 25.8 | AC | 50 | AC | 2.50 AC | 0.880 | AC | CLEAR | AC | HONE | A |
| 6/00/8 | 2 | | | | . 110 | AC | 25.4 | AC | 50 | AC | 2.50 A | 0.880 | AC | CLEAR | AC | NONE | A |
| 4/27/8 | 3 | | | | .100 | AC | 25.6 | AC | 37 | AC | 2.50 A | 0.880 | AC | CLEAR | AC | NONE | A |
| 5/14/8 | 4 | | | | . 080 | AC | 25.3 | AC | 38 | AC | 2.50 A | 0.880 | AC | CLEAR | AC | NONE | A |
| 7/16/8 | 5 | | | | .100 | AC | 23.9 | AC | 41 | AC | 2.50 A | 0.890 | AC | CLEAR | AC | NONE | A |
| 7/07/8 | 6 | | | | .100 | AC | 22.2 | AC | 43 | AC | 3.00 A | 0.890 | AC | CLEAR | AC | NONE | A |
| 5/27/8 | 7 | | | | . 120 | AC | 21.9 | AC | 40 | AC | 3.00 A | 0.890 | AC | CLEAR | AC | NONE | A |
| 5/04/8 | В | | | | . 120 | AC | 19.0 | AC | 41 | AC | 3.00 A | 0.890 | AC | CLEAR | AC | NONE | A |
| 5/11/8 | 9 | | 0 C | | .120 | AC | 19.9 | AC | 41 | AC | 3.00 A | 0.890 | AC | CLEAR | AC | NONE | A |

COMMENTS UNIT DOES NOT CONTAIN PAPER INSULATION. RECOMMENDATION-NO ADDITIONAL WORK UNTIL MOISTURE, MEDIUM TO HEAVY CARBON OR HIGH ACID ARE PRESENT.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|---------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| 12/26/79 | | ND | 25166 | 54542 | 3 | 7 | 415 | 3 | 8 | ND | 21 | 80144 |
| 10/04/80 | | ND | 25326 | 61500 | ОМ | 22 | 589 | CM | OM | DK | 55 | 87437 |
| 6107182 | | QK | 22106 | 62822 | ОИ | 15 | 308 | NO | ОМ | СM | 15 | 85251 |
| 5/02/83 | | מא | 24174 | 60703 | В | ND | 372 | סא | HD | ИD | OM | 85249 |
| 5/14/84 | | ND | 24545 | 56236 | OM | OM | 344 | סא | DM | NO | DM | 81125 |
| 7/16/85 | | DK | 22236 | 51117 | TRACE | 21 | 441 | ND | ND | ND | 21 | 73815 |
| 7/07/86 | | ND | 19861 | 48573 | TRACE | 8 | 308 | TRACE | TRACE | NO | 8 | 68750 |
| 5/27/87 | | NO | 22091 | 54511 | TRACE | 13 | 385 | ND | ND | ND | 13 | 77000 |
| 5/04/88 | | TRACE | 26591 | 58200 | ND | 7 | 453 | HD | סא | OM | 7 | 85251 |
| 5/11/89 | | ND | 24745 | 57243 | 2 | ND | 508 | 1 | TRACE | סא | 3 | 82499 |

RECOMMENDATION * COMMENTS

1

B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME. RETEST 1 YEAR

P.O. BOX 4734, PKRON, UH 4431.

5C :012

340/40

CUST CERRO COPPER PRODUCTS CITY 6/14/89 E ST LOUIS IL 0 # 07320060 DATE PRINTED OTHER BOLT TOP SUB NAME RIS OUTDOOR/GROUND UNIT # 1016 LOCATION NAMEPLATE DATA ADDITIONAL EQUIPMENT MFG. GE REGULATOR NO - 23 EQUIP. TYPE RADIATORS CONSERVATORS NO NC DATE MFG TRANS CLASS FANS LTC COMP 0460938 NO. SIDE S/N IMPEDANCE H₂O COOLED BUSHING LOC 315 3/60 ΝŌ 100 FEET KVA PHASE/CYCLE OIL PUMPS HOSE LENGTH 13,800 OIL 1.00 IN YE5 PRI LIQUID TYPE TOP FPV ENERGIZED

VISUAL INSPECTION

GAL LIQUID

PAINT CONDITION
BAD

LEAKS YES/BFPU

360

FIELD SERVICE

9/74 RE-REFINE

SEC

PCB CONTENT POPRESSED IN PPM 3.

POWER V/A

2.00 IN

BOTTOM FPV

OTHER ACCESS

576 E - 11/11/11

LIQUID SCREEN TEST DATA

| DATE | SERVICE | LEVEL | TEMP | P/V | ACID | | IFT | | DIEL | | COLOR | SP. GR. | | VISUAL | | SEDIMENT | |
|---------|---------|--------|------|-----|-------|----|--------------|----|------|----|---------|---------|----|--------|----|----------|---|
| 9/00/80 | | | | | . 050 | AC | 31.0 | QU | 37 | AC | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | £ |
| 9/00/81 | | | | | .040 | AC | 36.3 | AC | 45 | AC | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | A |
| 8100185 | | | | | .050 | AC | 37.2 | AC | 48 | AC | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | ¢ |
| 4/27/83 | | NORMAL | 35 C | | . 050 | AC | 34.6 | AC | 34 | AC | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | ŕ |
| 5/14/84 | | NORMAL | 30 C | | .030 | AC | 34.3 | AC | 42 | AC | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | 4 |
| 7/16/85 | | NORMAL | 40 C | | . 040 | AC | 33.5 | AC | 28 | QU | 2.00 AC | 0.885 | AC | CLEAR | AC | NONE | ŕ |
| 7/07/86 | | NORMAL | 40 C | | .030 | AC | 34.6 | AC | 34 | AC | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | A |
| 5/27/87 | | NORMAL | 50 C | | .030 | AC | 35.1 | AC | 39 | AC | 2.00 AC | 0.885 | AC | CLEAR | AC | NONE | A |
| 5/04/88 | | NORHAL | 30 C | • | .040 | 3A | 32. 8 | AC | 41 | AC | 2.00 AC | 0.880 | AC | CLEAR | 3A | NONE | A |
| 5/11/89 | • | LOW | 30 C | | .040 | AC | 34.0 | AC | 40 | AC | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | A |

COMMENTS TRANSFORMER LIQUID TEST DATA ACCEPTABLE IN ALL CATEGORIES.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|---------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| 10/08/80 | | HD | 27731 | 66794 | 9 | 7 | 1334 | 17 | 6 | OM | 39 | 95898 |
| 9/09/81 | | DM | 25596 | 58489 | 19 | 42 | 1074 | 20 | 9 | מא | 90 | 85249 |
| 6/07/82 | | ND | 19346 | 60337 | 4 | 20 | 427 | 8 | 1 | 00 | 33 | 80143 |
| 5/02/83 | | ND | 25210 | 61779 | 19 | 16 | 657 | 19 | 3 | OM | 57 | 87703 |
| 5/14/84 | | ND | 24354 | 58835 | NO | NO | 476 | 11 | TRACE | מא | 11 | 93676 |
| 7/16/85 | | ND | 26517 | 61749 | 24 | 30 | 1160 | 20 | 22 | NO | 145 | 89572 |
| 7107186 | | TRACE | 24242 | 59895 | 17 | 39 | 1934 | 16 | 8 | 40 | 80 | 85251 |
| 5/27/87 | | TRACE | 24140 | 51926 | 16 | 41 | 853 | 19 | 6 | ND | 32 | 77001 |
| 5/04/38 | | פא | 25144 | 67770 | 13 | 24 | 535 | 13 | TRACE | DN | 50 | 93499 |
| 5/11/89 | | 25 | 29946 | 65191 | 25 | 45 | 99 7 | 24 | 7 | MD | 126 | 96250 |

RECOMMENDATION # COMMENTS

RETEST 1 YEAR * 8-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME.

P 0. 80x 4/24, 3KRCN OH 44310

CUST CERRO COPPER PRODUCTS CITY

SUB NAME RIC SPARE

E ST LOUIS IL

UNIT #

1015

OTHER EX. COVER

10 # 07320000 DATE PRINTED

LOCATION

DUTOCOR/GROUNG

PCB CONTENT EXPRESSED REPPRE

6/14/89

| است | NAM | EPLATE DATA | de de la companya de | de la companya de la | ADDITIONAL | EQUIPMENT | vor dis ver ning patriologi e antone – Anton l |
|---------|--------------|-----------------|--|--|----------------|--------------|---|
| MFG | WESTINGHOUSE | EQUIP. TYPE | AUTO TRANSFORMER | RADIATORS | YES | CONSERVATORS | NO |
| DATE | MFG | TRANS CLASS | 9A | FANS | ∄ 0 | LTC COMP | ИО |
| S/N | PCR 90211 | ™PEDANCE | 2.30% | H ₂ 0 COOLED | но | BUSHING LOC | TOP |
| KVA | 2,000 | PHASE/CYCLE | 3/60 | OIL PUMPS | 40 | HOSE LENGTH | 100 FEET |
| PRI | 13,800 | LIQUID TYPE | OIL | TOP FPV | 1.00 IN | ENERGIZED | YES |
| SEC | 7,500 | GAL LIQUID | 340 | BOTTOM FPV | 2 00 IN | POWER V/A | 400/30 |
| | | | | OTHER ACCESS | TOP INSPECTION | N PLATE | |

VISUAL INSPECTION

PAINT CONDITION FAIR

LEAKS

HONE

FIELD SERVICE

LIQUID SCREEN TEST DATA

| · DATE | SERVICE | LEVEL | TEM | P | P/V | ACID | | IFT | | DIE | r | COLOR | | SP. GR. | | VISUAL | | SEDIMENT | |
|--------|----------|--------|-------|-------|--------|----------|------|------------|----|-----|-----|-------|----|---------|----|--------|----|----------|----|
| | | | | • • | .,. | | | | | | | | | - | | | | | |
| 9/00/8 | 0 | | | | | . 050 | AC | 33.0 | AC | 41 | AC | 1.50 | AC | 0.890 | AC | CLEAR | AC | NONE | AC |
| 910018 | 1 | | | | | . 030 | AC | 36.4 | AC | 45 | AC | 1.00 | 3A | 0.880 | AC | CLEAR | AC | NONE | AC |
| 6/00/8 | 2 | | | | | .040 | AC | 35.5 | AC | 44 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE | AC |
| 4/27/8 | 3 | NORHAL | 25 | C | 2.0 | . 050 | AC | 32.3 | AC | 36 | 3A | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE | AC |
| 5/14/8 | 4 | NORHAL | 25 | C | 0.5 | . 040 | AC | 32.1 | AC | 44 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE | AC |
| 7/16/8 | 5 | NORMAL | 35 | £ | 1.5 | .040 | AC | 31.1 | QU | 44 | AC. | 1.00 | AC | 0.890 | 3A | CLEAR | AC | NONE | AC |
| 7/07/8 | 6 | NORMAL | 35 | С | 1.4 | . 040 | AC | 31.5 | бП | 35 | AC | 1.50 | AC | 0.880 | AC | CLEAR | AC | NONE | AC |
| 5/27/8 | 7 ****** | TON # | TESTE |) PEI | R CUST | OHER REQ | UEST | | | | | | | | | | | | |
| 5/04/8 | В | NORHAL | 30 | C | 1.0 | . 040 | AC | 30.0 | QU | 42 | AC | 1.50 | AC | 0.880 | AC | CLEAR | AC | NONE | AC |
| 5/11/8 | 9 | MORNAL | 25 | C | 1.0 | .040 | AC | 31.4 | QU | 45 | AC | 1.50 | AC | 0.880 | AC | CLEAR | AC | NONE | AC |

COMMENTS ACID AND/OR IFT TEST INDICATES THE PRESENCE OF OXIDATION BY-PRODUCTS.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | MONOXIDE | DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS | |
|----------|---------|----------|--------|----------|---------|----------|---------|--------|----------|-----------|----------------------|--------------|--|
| 2/13/79 | | ND | 6449 | 63532 | 74 | 79 | 1216 | 141 | 9 | HĐ | 303 | 71500 | |
| 12/26/79 | | OM | 10354 | 63637 | 65 | 90 | 8173 | 171 | 10 | ND | 336 | 82500 | |
| 10/05/80 | | 15 | 2714 | 75065 | 85 | 106 | 8377 | 242 | 22 | ND | 467 | 86653 | |
| 5/14/84 | | מא | 17194 | 95859 | 44 | 19 | 3567 | 506 | 18 | DM | 297 | 83874 | |
| 7/16/85 | | ND | 1584 | 79599 | 114 | 111 | 6257 | 314 | 50 | ИО | 559 | 87999 | |
| 7/07/86 | | ND | 1676 | 64030 | 96 | 80 | 5318 | 263 | 37 | ND | 476 | 71500 | |
| 5/04/88 | | TRACE | 1349 | 75327 | 117 | 103 | 5191 | 388 | 26 | ОМ | 634 | 82501 | |
| 5/11/89 | | 25 | 1248 | 88888 | 141 | 125 | 4524 | 530 | 25 | DH | 846 | 93500 | |
| | | | | | | | | | | | | | |

RECOMMENDATION * COMMENTS

- RETEST 6 MONTHS * YH- ANALYSIS OF THIS SAMPLE SHOWS THAT THE LARGE MAJORITY OF THE COMBUSTIBLE GASES ARE THE HYDROCARBON SATURA
 - * METHANE AND ETHANE. THESE GASES ARE FORMED FROM THE TRANSFORMER DIL UNDER RELATIVELY LOW THERMAL STRESS.
 - * TEMPERATURES OF AROUND 300 DEGREES ARE BEING REACHED INTERNALLY. WE RECOMMEND THAT YOU MONITOR THIS UNIT TO N
 - ANY TRENDS TAKING PLACE.

୭ ଓ ୧୦% ୩୩୦୩, AKୟତଃଖ ଓଖ ୩୩୫୫୦

CUST CERRO COPPER PRODUCTS CITY E ST LOUIS IL SUB NAME FOUNCRY

UNIT# 1275

| 10 # | 17320000 | DATE PRINTED LOCATION SUTBOOK GROUND

| • | NAM | EPLATE DATA | | | ADDITIONAL | L EQUIPMENT | • |
|------|--------------|-------------|-------------|--------------|--------------|--------------|------------|
| MFG. | WESTINGHOUSE | EQUIP. TYPE | TRANSFORMER | RADIATORS | ₹ E S | CONSERVATORS | MO |
| DATE | MFG. | TRANS CLASS | θA | FANS | HO. | LTC COMP | NO |
| S/N | PAV836901 | IMPEDANCE | 5.70% | H+O COOLED | NO | BUSHING LOC | TOP & SIDE |
| KVA | 1,500 | PHASE/CYCLE | 3/60 | OIL PUMPS | 90 | HOSE LENGTH | 100 FEET |
| PRI | 13,800 | LIQUID TYPE | DIL | TOP FPV | 1.00 IN | ENERGIZED | YES |
| SEC | 480 | GAL LIQUID | 297 | BOTTOM FPV | 1.00 Ib | POWER V/A | 400/30 |
| | | | | OTHER ACCECC | TOP INSPECTI | ON PLATE | |

VISUAL INSPECTION

PAINT CONDITION FAIR

LEAKS

NONE

FIELD SERVICE

LIQUID SCREEN TEST DATA

| DATE | SERVICE | LEVEL | TEMP | P/V | ACID | | IFT | | DIE | | COLOR | | SP. GR. | | VISUAL | | SEDIMENT |
|---------|---------|--------|------|-----|-------|----|------|----|-----|----|-------|----|---------|----|--------|----|----------|
| 9/00/80 |) | | | | . 050 | AC | 31.1 | QU | 39 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 9/00/81 | l | | | | .040 | AC | 33.4 | AC | 50 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 6/00/82 | 2 | | | | . 050 | AC | 33.6 | AC | 43 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 4/27/83 | 3 | NORMAL | 40 C | 1.5 | . 040 | AC | 32.2 | AC | 38 | AC | 1.50 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 5/14/84 | 1 | NORMAL | 40 C | 0.7 | . 050 | AÇ | 32.0 | AC | 43 | AC | 1.50 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 7/16/85 | 5 | NORMAL | 50 C | 2.0 | . 050 | AC | 32.2 | AC | 44 | AC | 1.50 | AC | 0.890 | AC | CLEAR | AC | NONE |
| 7/07/86 | 3 | NORMAL | 48 C | 1.8 | . 050 | AC | 31.1 | QU | 41 | AC | 2.00 | AC | 0.890 | AC | CLEAR | AC | NONE |
| 5/27/87 | 7 | NORHAL | 49 C | 2.0 | .060 | QU | 31.0 | QU | 45 | AC | 2.00 | AC | 0.890 | AC | CLEAR | AC | NONE |
| 5/04/88 | 3 | LOW | 30 C | 1.0 | . 060 | QU | 28.1 | QU | 41 | AC | 2.00 | AC | 0.890 | AC | CLEAR | AC | NONE |
| 5/11/89 |) | LOW | 25 C | 1.0 | .060 | QU | 30.0 | QU | 43 | AC | 2.00 | AC | 0.885 | AC | CLEAR | AC | NONE |

COMMENTS ACID AND/OR IFT TEST INDICATES THE PRESENCE OF OXIDATION BY-PRODUCTS.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| | | | | | | CARBON | CARBON | | | | TOTAL | TOTAL |
|----------|---------|----------|--------|----------|---------|----------|---------|--------|----------|-----------|-------------|-------|
| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | MONOXIDE | DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | COMBUSTIBLE | GAS |
| 10/06/80 | | ON | 18614 | 67015 | TRACE | 411 | 7425 | 5 | 32 | HD | 445 | 93499 |
| 9/09/81 | | HD | 17873 | 63929 | CM | 411 | 7136 | 2 | 24 | GK | 437 | 89375 |
| 6/07/82 | | HD | 17960 | 63177 | TRACE | 261 | 5304 | ND | 24 | OK | 285 | 86626 |
| 5/02/83 | | DM | 15534 | 64022 | TRACE | 342 | 4806 | TRACE | 25 | DM | 367 | 84729 |
| 5/14/84 | | DM | 22317 | 57321 | DM | 35 | 5309 | 1 | 23 | מא | 56 | 82500 |
| 7/16/85 | | ND | 14722 | 54433 | 6 | 328 | 7475 | 2 | 35 | ND | 371 | 77001 |
| 7107186 | | DM | 13268 | 46783 | 1 | 281 | 1662 | 1 | 35 | DM | 318 | 66000 |
| 5/27/87 | | סא | 16361 | 60447 | 5 | 339 | 7672 | TRACE | 32 | ND | 376 | 84856 |
| 5/04/88 | | DM | 11655 | 43016 | 2 | 106 | 2951 | 1 | 19 | OM | 128 | 57750 |
| 5/11/89 | | 31 | 19038 | 68374 | 10 | 445 | 5553 | 3 | 47 | ΝО | 536 | 93501 |

RECOMMENDATION # COMMENTS

RETEST 1 YEAR * B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME.

CUST CERRO COPPER PRODUCTS CITY

SUB NAME FOUNDRY AIR POLL.

- 3. 89% 4724. AKROM. 8H 44319

5C (6)

5/14/89

NAMEPLATE DATA **ADDITIONAL EQUIPMENT** MEG. WESTINGHOUSE TRANSFORMER YE5 EQUIP. TYPE RADIATORS CONSERVATORS ÐΑ NO: ИO DATE MFG. TRANS CLASS FANS LTC COMP NO. 5**BV30**6201 5.50% SIDE S/N IMPEDANCE H-0 COOLED **BUSHING LOC** 2,500 3/60 ЮK 100 FEET PHASE/CYCLE OIL PUMPS HOSE LENGTH 13,300 OIL **1E5** 1 00 IN PRI LIQUID TYPE TOP FPV ENERGIZED 4,150 443 MI 00.5 400/30 BOTTOM FPV SEC GAL LIQUID POWER V/A

OTHER EX COUER

VISUAL INSPECTION

PAINT CONDITION

LEAKS

E ST LOUIS IL

1276

NONE

FIELD SERVICE

PCB CONTENT / EXPRESSED IN PPM

TOP INSPECTION PLATE

ID# 07320000 CATE PRINTED

LCCATION

ONTOOCK/GROUND

OTHER ACCESS

1007 1007 1007

LIQUID SCREEN TEST DATA

| DATE SERVICE | LEVEL | TEMP | P/V | ACID | | IFT | | DIEL | | COLOR | | SP. GR. | | VISUAL | | SEDIMENT |
|--------------|--------|------|-----|-------|----|------|----|------|----|-------|----|---------|----|--------|----|----------|
| . 9/00/80 | | | | . 040 | AC | 34.0 | AC | 44 | AC | 0.50 | AC | 0.890 | AC | CLEAR | AC | NONE |
| 9/00/81 | | | | . 040 | AC | 34.6 | AC | 50 | AC | 0.50 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 6/00/82 | | | | .040 | AC | 36.5 | AC | 42 | AC | 0.50 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 4/27/83 | NORMAL | 38 C | 0.2 | . 040 | AC | 34.0 | AC | 42 | AC | 0.50 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 5/14/84 | NORMAL | 38 C | 0.2 | . 030 | AC | 34.1 | AC | 45 | AC | 0.50 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 7/16/85 | NORMAL | 42 C | 0.5 | . 060 | QU | 33.9 | AC | 44 | AC | 0.75 | AC | 0.895 | AC | CLEAR | AC | NONE |
| 7/07/86 | NORMAL | 45 C | 2.0 | . 050 | AC | 34.0 | AC | 46 | AC | 0.75 | AC | 0.890 | AC | CLEAR | AC | NONE |
| 5/27/87 | NORMAL | 46 C | 2.0 | . 040 | AC | 33.9 | AC | 47 | AC | 0.75 | AC | 0.885 | AC | CLEAR | AC | NONE |
| 5/04/88 | NORMAL | 35 C | 1.0 | . 050 | AC | 32.0 | AC | 42 | AC | 0.75 | AC | 0.890 | AC | CLEAR | AC | NONE |
| 5/11/89 | LOW | 32 C | 0.5 | . 050 | AC | 33.4 | AC | 42 | AC | 1.00 | AC | 0.885 | AC | CLEAR | AC | NONE |

COMMENTS TRANSFORMER OIL TEST DATA ACCEPTABLE, HOWEVER STUDIES INDICATE OXIDATION BY-PRODUCTS TRAPPED IN INSULATION.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|---------|---------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| 9/09/81 | | ND | 6704 | 64667 | סא | 1203 | 12659 | 5 | 12 | ND | 1220 | 85250 |
| 6/07/82 | | ND | 8242 | 62372 | 10 | 1489 | 15891 | 6 | םא | ND | 1505 | 88000 |
| 5/02/83 | | OM | 7534 | 63391 | 11 | 1267 | 8179 | 3 | TRACE | ND | 1281 | 80385 |
| 5/14/84 | | OM | 18460 | 57972 | OM | 394 | 8415 | 9 | סא | DM | 403 | 85250 |
| 7/16/85 | | OM | 2976 | 75676 | 24 | 1743 | 13543 | 8 | 11 | ND | 1786 | 99001 |
| 7/24/85 | | OM | 2976 | 75676 | 24 | 1743 | 18543 | 8 | 11 | ИD | 1786 | 99001 |
| 7/07/36 | | ND | 3779 | 70082 | 22 | 1495 | 17238 | 12 | 4 | DM | 1533 | 72632 |
| 5/27/87 | | ND | 4651 | 73037 | 25 | 1660 | 19614 | 7 | 7 | HD. | 1699 | 99001 |
| 5/04/98 | | TRACE | 4689 | 69126 | 19 | 1339 | 12827 | TRACE | TRACE | ND | 1358 | 88000 |
| 5/11/89 | | 26 | 7401 | 79475 | 32 | 1576 | 7724 | 9 | 7 | ND | 1650 | 96250 |

RECOMMENDATION * COMMENTS

RETEST 1 YEAR # 8-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME.

100 FEET

YE5

400/30

S# 17320000 DATE PRINTED CUST CERRO COPPER PRODUCTS E ST LOUIS IL 6/14/89 CITY SUB NAME SHIPPING **GUTDOOR, ROOF** UNIT # LOCATION OTHER NAMEPLATE DATA **ADDITIONAL EQUIPMENT** MEG. WESTINGHOUSE .53 TRANSFORMER NO EQUIP TYPE RADIATORS CONSERVATORS GA и0 DATE MFG. TRANS CLASS FANS LTC COMP 5062487 6.00% ΝO SIDE IMPEDANCE S/N H₂O COOLED BUSHING LOC

VISUAL INSPECTION

PHASE/CYCLE

LIQUID TYPE

GAL LIQUID

PAINT CONDITION BAD

LEAKS

3/60

OIL

YES/TEPU & TAP

FIELD SERVICE

3/79 RE-REFINE

1,000

13,800

KVA

PRI

SEC

PCB CONTENT / EXPRESSED IN PPM

TOP INSPECTION PLATE

OIL PUMPS

BOTTOM FPV

OTHER ACCESS

TOP FPV

NO

1.00 IN

1.00 IN

HOSE LENGTH

ENERGIZED

POWER V/A

LIQUID SCREEN TEST DATA

DATE SERVICE LEVEL TEMP P/V ACID DIEL COLOR SP GR IFT VISUAL SEDIMENT 9/00/80 .030 AC 34.4 AC 41 AC 2.00 AC 0.870 AC CLEAR AC NONE 9/00/81 .030 40.5 AC 50 AC 2.00 AC 0.880 AC CLEAR AC NONE 6/00/82 . 030 41.1 AC NONE 50 AC 2.00 AC 0.880 CLEAR AC AC AC 4/27/83 NORMAL .040 36.9 AC 38 AC 2.00 0.880 CLEAR AC HONE AC 5/14/84 NORMAL 35 C 45 AC 2.00 UN 0.880 CLEAR AC NONE 0.0 .040 NOT TESTED PER CUSTOMER REQUEST 7/07/86 ****** NOT TESTED PER CUSTOMER REQUEST 5/27/87 NORMAL 40 C . 030 0.880 AC CLEAR AC NONE 0.0 AC 36.0 AC 42 AC 2.00 AC 5/04/88 LOW 20 C .030 34.9 AC 41 AC 0.880 CLEAR NONE 5/11/89 LOW 25 C .030 AC 35.2 AC 44 AC 2.00 AC 0.880 CLEAR AC NONE 0.0

COMMENTS TRANSFORMER OIL TEST DATA ACCEPTABLE, HOWEVER STUDIES INDICATE OXIDATION BY-PRODUCTS TRAPPED IN INSULATION.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|---------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| 2/13/79 | | 131 | 18157 | 61385 | 13 | 137 | 1973 | 11 | 22 | NO | 314 | 81829 |
| 12/26/79 | | ND | 19364 | 48645 | 3 | 53 | 1065 | 1 | 12 | ND | 69 | 69143 |
| 10/05/80 | | ND | 22610 | 67424 | TRACE | 117 | 2459 | 1 | 20 | מא | 138 | 92631 |
| 9/09/81 | | QM | 24647 | 59354 | TRACE | 89 | 1135 | 1 | 23 | ND | 113 | 85249 |
| 6/07/82 | | МО | 25263 | 61373 | OM | 38 | 744 | NO | 18 | ОМ | 56 | 87436 |
| 5/02/83 | | Оh | 26403 | 72442 | ND | 4 | 732 | ND | 14 | OM | 18 | 99595 |
| 5/14/84 | | ND | 22344 | 62277 | ND | ND | 620 | NO | 10 | HD | 10 | 85251 |
| 5/27/87 | | 46 | 25255 | 64095 | 2 | 17 | 725 | NO | 3 | ND | 69 | 91143 |
| 5/04/38 | | ND. | 21682 | £00E3 | 1 | 7 | 552 | NO | DM | ND | 8 | 85245 |
| 5/11/89 | | 107 | 30200 | 64851 | 3 | 37 | 1048 | 1 | 3 | DM | 151 | 96250 |

COMMENTS RECOMMENDATION

RETEST 1 YEAR * B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME.

CUST CERRO COPPER PRODUCTS CITY E ST LOUIS IL 10 # 97320000 CATE PRINTED 6/14/89 LOCATION OUTDOUR/GROUND SUB NAME #2 4ILL UNIT # 1007 OTHER

| | | NAMEPLATE DATA | | | ADDITIONAL | . EQUIPMENT | |
|------|---------|----------------|-------------|--------------|----------------|--------------|------------|
| MFG | AC | EQUIP TYPE | TRANSFORMER | RADIATORS | YES | CONSERVATORS | ИО |
| DATE | MFG. | TRANS CLASS | 0A | FANS | но | LTC COMP | NO |
| S/N | 2451170 | IMPEDANCE | J.00% | H-O COOLED | 40 | BUSHING LOC | TOP & SIDE |
| KVA | 100 | PHASE/CYCLE | 1/60 | OIL PUMPS | ИС | HOSE LENGTH | 50 FEET |
| PRI | 13,800 | LIQUID TYPE | OIL | TOP FPV | | ENERGIZED | YES |
| SEC | 120 | GAL LIQUID | 88 | BOTTOM FPV | 50 IN | POWER V/A | 400/40 |
| | | | | OTHER ACCESS | TOP INSPECTION | IN PLATE | |

VISUAL INSPECTION

PAINT CONDITION FAIR

LEAKS

NONE

FIELD SERVICE

10/75 RE-REFINE

7/83 RE-REFINE

7/88 HOST

PCB CONTENT / EXPRESSED IN PPM

LIQUID SCREEN TEST DATA

| DATE S | SERVICE | LEVEL | TEMP | P/V | ACID | | IFT | | DIEL | • | COLOR | | SP. GR. | | VISUAL | | SEDIMENT |
|----------|---------|-------|------|-----|-------|----|------|----|------|----|-------|----|---------|----|--------|----|----------|
| -6100182 | | | | | . 090 | QU | 31.4 | QU | 50 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 4/27/83 | | | | | .090 | QU | 28.6 | QU | 41 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 7/14/83 | | | | | . 020 | AC | 45.5 | AC | 45 | AC | 1.50 | AC | 0.890 | AC | CLEAR | AC | NONE |
| 5/14/84 | | | | | .040 | AC | 38.2 | AC | 46 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 7/16/85 | | | | | .050 | AC | 36.1 | AC | 45 | AC | 2.00 | AC | 0.890 | AC | CLEAR | AC | NONE |
| 7/07/86 | | | | | .040 | AC | 34.9 | AC | 48 | AC | 2.50 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 5/27/87 | | | | | .050 | AC | 34.1 | AC | 41 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 5/04/88 | | | | | . 050 | AC | 30.8 | QU | 40 | AC | 2.50 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 7/09/88 | PROOF | | | | .010 | AC | 41.6 | AC | 41 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 5/11/89 | | | | | . 040 | AC | 30.7 | QU | 44 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE |

COMMENTS ACID AND/OR IFT TEST INDICATES THE PRESENCE OF OXIDATION BY-PRODUCTS.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARSON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|---------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| 10/04/80 | | ND | 22067 | 73659 | ND | 306 | 6302 | 8 | 20 | ND | 334 | 102362 |
| 9/09/81 | | ND | 21230 | 62814 | 5 | 283 | 6394 | 8 | 17 | סא | 313 | 90751 |
| 6/07/92 | | CH CH | 21891 | 64320 | TRACE | 114 | 4794 | 6 | 18 | DH | 138 | 91143 |
| 5/02/83 | | ДH | 20537 | 62514 | 6 | 127 | 4790 | ة | 20 | ND | 159 | 88000 |
| 5/14/84 | | ND | 21812 | 62679 | GK | 1 | 755 | 3 | TRACE | DM | 4 | 85250 |
| 7/24/85 | | ND | 23810 | 60306 | 3 | 99 | 2205 | 2 | 6 | ДM | 110 | 86431 |
| 7/07/96 | | МО | 21203 | 54325 | TRACE | 95 | 2522 | 1 | 11 | ПH | 107 | 78157 |
| 5/27/37 | | TRACE | 25223 | 60732 | 4 | 135 | 3464 | 5 | 11 | ND | 152 | 89571 |
| 5/04/88 | | TRACE | 27371 | 67537 | 5 | 103 | 3966 | 3 | 16 | ND | 127 | 99001 |
| 5/11/39 | | 27 | 29134 | 69922 | 5 | 128 | 2625 | 2 | 6 | DM | 168 | 101749 |

RECCHMENDATION * COMMENTS

RETEST 1 YEAR

* B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME.

CUST CERRO COPPER PRODUCTS

9 3 SOX 4734 AKRON, IH 44010

5C 9925

CATE PRINTED

6/14/89

SUB NAME \$2 MILL DETOCOR/ GROUND 1008 UNIT# OTHER LOCATION NAMEPLATE DATA ADDITIONAL EQUIPMENT TRANSFORMER MFG. EQUIP TYPE RADIATORS CONSERVATORS NC ĦŨ DATE MFG. TRANS CLASS FANS LTC COMP 2343399 4.00% NO TOP & SIDE S/N IMPEDANCE H₂0 COOLED **BUSHING LOC** 100 NO 50 FEET 1/60 KVA PHASE/CYCLE OIL PUMPS HOSE LENGTH 13,800 1.00 IN YES OIL PRI LIQUID TYPE TOP FPV **ENERGIZED** 120 50 IN 400/40 SEC **GAL LIQUID BOTTOM FPV** POWER V/A TOP INSPECTION PLATE OTHER ACCESS

VISUAL INSPECTION

PAINT CONDITION FAIR LEAKS

E ST LOUIS IL

HONE

FIELD SERVICE

10/75 RE-REFINE

7/83 RE-REFINE

C:TY

7/88 HOCT

PCB CONTENT / EXPRESSED IN PPM 3

D# 073200:0

LIQUID SCREEN TEST DATA

| DATE S | ERVICE | LEVEL | TEMP | P/V | ACID | | IFT | | DIEL | • | COLOR | SP. GR. | | VISUAL | | SEDIMENT | |
|---------|--------|-------|------|-----|-------|----|------|----|------|----|---------|---------|----|--------|----|----------|---|
| 8100/82 | | | | | . 080 | QU | 30.3 | QU | 45 | AC | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | £ |
| 4/27/83 | | | | | . 060 | QU | 29.1 | QU | 37 | AC | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | £ |
| 7/14/83 | | | | | . 020 | AC | 45.8 | AC | 44 | AC | 1.50 AC | 0.890 | AC | CLEAR | AC | NONE | £ |
| 5/14/84 | | | | | . 040 | AC | 35.5 | AC | 39 | AC | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | A |
| 7/16/85 | | | | | . 040 | AC | 33.9 | AC | 44 | 3A | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | A |
| 7/07/86 | | | | | . 050 | AC | 31.9 | QU | 47 | AC | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | £ |
| 5/27/87 | | | | | . 050 | AC | 31.1 | QU | 45 | AC | 2.00 AC | 0.875 | AC | CLEAR | AC | NONE | A |
| 5/04/88 | | | | | . 070 | QU | 27.2 | UN | 41 | AC | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | A |
| 7/09/88 | PROOF | | | | .020 | AC | 40.9 | AC | 46 | AC | 1.00 AC | 0.870 | AC | CLEAR | AC | NONE | P |
| 5/11/89 | | | | | .030 | AC | 35.0 | AC | 43 | AC | 2.00 AC | 0.880 | AC | CLEAR | AC | NONE | £ |

COMMENTS TRANSFORMER LIQUID TEST DATA ACCEPTABLE IN ALL CATEGORIES.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| | | | | | | CARBON | CARBON | | | | TOTAL | TOTAL |
|----------|---------|----------|--------|----------|---------|----------|---------|--------|----------|-----------|-------------|-------|
| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | MONOXIDE | DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | COMBUSTIBLE | GAS |
| 12/26/79 | | DM | 24580 | 56781 | 1 | 41 | 1872 | ND | 10 | DM | 52 | 83285 |
| 9/09/81 | | OM | 27009 | 59114 | ON | 37 | 1825 | ND | 16 | DM | 53 | 88001 |
| 6/07/82 | | ON | 22829 | 62942 | NO | 14 | 834 | ND | 6 | ИD | 20 | 86625 |
| 5/02/83 | | OM | 24164 | 67608 | ND | 2 | 934 | 014 | 5 | מא | 7 | 92713 |
| 5/14/84 | | NO | 24856 | 54111 | DM | 1 | 780 | ND | 2 | םא | 3 | 79750 |
| 7/24/85 | | ND | 26553 | 60381 | TRACE | 26 | 1038 | ND | 5 | ND | 28 | 88000 |
| 7/07/86 | | ND | 25235 | 56158 | TRACE | 21 | 1086 | TRACE | TRACE | DM | 21 | 82500 |
| 5/27/87 | | DM | 29166 | 60985 | TRACE | 25 | 967 | NO | TRACE | OM | 25 | 91143 |
| 5/04/88 | | TRACE | 25682 | 53444 | ND | 12 | 609 | ND | 5 | 2 | 16 | 79751 |
| 5/11/39 | | 14 | 59500 | 57784 | 3 | 34 | 1213 | 1 | 1 | OM | 53 | 85250 |

RECOMMENDATION * COMMENTS

RETEST 1 YEAR * B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME.

*

P 8. 30% 4784 AKPON, CH 44318

0025

CUST CERRO COPPER PRODUCTS CITY E ST LOUIS IL D# 07320000 DATE PRINTED 6/14/89 BUTDOOR! GROUND SUB NAME #2 MILL UNIT # LOCATION OTHER

| | inema-Chirmide vid i / Shibhaka | NAMEPLATE DATA | Processing and Application of the process of the contraction of the co | The second secon | ADDITION | AL EQUIPMENT | |
|------|---------------------------------|----------------|--|--|------------|--------------|------------|
| MFG. | AC . | EQUIP. TYPE | TRANSFORHER | RADIATORS | YES | CONSERVATORS | H 0 |
| DATE | MFG | TRANS CLASS | 0A | FANS | NO. | LTC COMP | NO |
| S/N | 2451167 | IMPEDANCE | 4.00% | H-0 C00LED | 40 | BUSHING LOC | 3016 1 90T |
| KVA | 100 | PHASE/CYCLE | 1/60 | OIL PUMPS | 40 | HOSE LENGTH | 50 FEET |
| PRI | 13,800 | LIQUID TYPE | 0 I L | TOP FPV | | ENERGIZED | YE5 |
| SEC | 120 | GAL LIQUID | 88 | 80TTOM FPV | .50 In | POWER V/A | 400/40 |
| | | | | OTHER ACCECE | TOP INSPEC | TION PLATE | |

VISUAL INSPECTION

PAINT CONDITION FAIR

LEAKS

NONE

FIELD SERVICE

10/75 RE-REFINE 7/83 RE-REFINE

7/83 HOCT

PCB CONTENT / EXPRESSED IN PPM

LIQUID SCREEN TEST DATA

| DATE SERVE | CE LEVEL | TEMP | P/V | ACID | | IFT | | DIEL | | COLOR | | SP. GR. | | VISUAL | | SEDIMENT |
|------------|----------|------|-----|-------|----|------|----|------|-----|-------|----|---------|----|--------|-----|----------|
| - 6100185 | | | | . 060 | QU | 31.7 | QU | 38 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 4/27/83 | | 0 C | | .050 | AC | 30.6 | QU | 37 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 7/14/83 | | | | .020 | AC | 45.5 | AC | 40 | AC | 2.00 | AC | 0.890 | AC | CLEAR | AC | NONE |
| 5/14/84 | | | | . 040 | AC | 36.3 | AC | 44 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 7/16/85 | | | | .040 | AC | 33.1 | AC | 41 | AC | 2.00 | AC | 0.890 | AC | CLEAR | AC | NONE |
| 7/07/86 | | | | . 050 | AC | 33.9 | AC | 45 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 5/27/87 | | | | . 060 | QU | 31.8 | QU | 44 | AC | 2.00 | AC | 0.885 | AC | CLEAR | AC | NONE |
| 5/04/88 | | | | . 060 | QU | 28.8 | QU | 44 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 7/09/88 PR |)OF | | | .010 | AC | 43.2 | AC | 46 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 5/11/89 | | | | 0.40 | AC | 37 0 | AC | 46 | AC. | 1 50 | AC | 0 880 | AC | CLEAR | AC. | NONE |

COMMENTS TRANSFORMER LIQUID TEST DATA ACCEPTABLE IN ALL CATEGORIES.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| OATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|---------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| 10/07/80 | | פא | 25551 | 66900 | ДK | 43 | 1988 | 1 | 4 | DM | 48 | 94487 |
| 9/09/81 | | ND | 25256 | 58369 | OM | 41 | 1581 | ND | 3 | ND | 44 | 85250 |
| 6/07/82 | | ND | 24092 | 63143 | ND | 16 | 747 | ND | 1 | ND | 17 | 87999 |
| 5/02/83 | | ON | 24976 | 65351 | ND | 21 | 833 | 1 | 2 | ND | 24 | 91184 |
| 5/14/84 | | OM | 24760 | 57165 | ЯD | ND | 574 | 0# | 1 | ND | 1 | 92500 |
| 7/24/85 | | ND | 21080 | 58013 | 1 | 56 | 1019 | TRACE | 2 | ND | 31 | 80143 |
| 7/07/86 | | ОМ | 23560 | 52019 | TRACE | 41 | 1377 | ND | 3 | ND | 44 | 77000 |
| 5/27/37 | | ND | 23619 | 50673 | TRACE | 26 | 1111 | סא | TRACE | В | 26 | 75429 |
| 5/04/88 | | ND | 24325 | 57373 | NO | 16 | 785 | ND | 2 | OM | 18 | 8250 i |
| 5/11/39 | | 18 | 31746 | 66624 | 3 | ON | 610 | CM | TRACE | ND | 21 | 99001 |

RECONHENDATION # COMMENTS

RETEST 1 YEAR * B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME. CUST CERRO COPPER PRODUCTS

9 0, 80X 4734 AKR64 0H 44310

9930

6/14/89

D# 07320000 DATE PRINTED SUB NAME EXTRUSION BAY OUTDOUR/GROUND UNIT# LOCATION OTHER NAMEPLATE DATA ADDITIONAL EQUIPMENT MFG AC TRANSFORMER EQUIP TYPE RADIATORS CONSERVATORS OΑ ИO NO DATE MFG TRANS CLASS FANS LTC COMP 5.70% 3333451 NO SIDE S/N IMPEDANCE H₂0 COOLED BUSHING LOC 3/50 NO 100 FEET 3,750 KVA PHASE/CYCLE OIL PUMPS HOSE LENGTH 13,800 OIL 1.00 IN PRI LIQUID TYPE TOP FPV ENERGIZED 776 400/30 4,160 1.00 IN SEC GAL LIQUID **BOTTOM FPV** POWER V/A

VISUAL INSPECTION

CITY

PAINT CONDITION

LEAKS

E OT LOUIS IL

COOD

NONE

FIELD SERVICE

TOP INSPECTION PLATE

OTHER ACCESS

LIQUID SCREEN TEST DATA

| , OATE | SERVICE | LEVEL | TEMP | P/V | ACID | | IFT | | DIEL | | COLOR | | SP. GR. | | VISUAL | | SEDIMENT |
|---------|----------|--------|------|-----|-------|----|------|----|------|----|-------|----|---------|----|--------|----|----------|
| 9/00/80 |) | | | | .030 | AC | 33.7 | AC | 41 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 9/00/81 | | | | | . 040 | AC | 35.7 | AC | 50 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 6/00/82 | ? | | | | . 040 | AC | 35.7 | AC | 48 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 4/27/83 | 1 | NORHAL | 45 C | 1.7 | .040 | AC | 35.2 | AC | 37 | AC | 1.50 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 5/14/84 | } | NORMAL | 40 C | 0.2 | . 030 | AC | 35.8 | AC | 43 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 7/16/85 | i | NORMAL | 39 C | 1.0 | .030 | AC | 35.2 | AC | 45 | AC | 1.00 | AC | 0.890 | AC | CLEAR | AC | HONE |
| 7/07/86 | i | NORMAL | 50 C | 2.0 | . 020 | AC | 36.0 | AC | 41 | AC | 1.00 | AC | 0.890 | AC | CLEAR | AC | NONE |
| 5/27/87 | 7 | NORHAL | 45 C | 1.0 | .030 | AC | 36.1 | AC | 41 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 5/04/88 | 3 | NORMAL | 30 C | | . 020 | AC | 34.9 | AC | 43 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| 5/11/89 |) | NORMAL | 34 C | 0.0 | . 020 | AC | 36.0 | AC | 47 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE |
| | | | | | | | | | | | | | | | | | |

COMMENTS TRANSFORMER OIL TEST DATA ACCEPTABLE, HOWEVER STUDIES INDICATE OXIDATION BY-PRODUCTS TRAPPED IN INSULATION.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|---------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| 10/05/80 | | OM | 4221 | 76257 | 62 | 96 | 1708 | 142 | 13 | NO | 313 | 82499 |
| 9/09/81 | | NO | 2924 | 66619 | 70 | 121 | 1617 | 135 | 13 | D | 339 | 71499 |
| 6/07/82 | | NO | 11473 | 61919 | 22 | 35 | 727 | 63 | 5 | DM | 131 | 74250 |
| 5/02/83 | | ND | 5403 | 71618 | 69 | 115 | 1600 | 154 | 15 | OM | 353 | 78974 |
| 5/14/84 | | HD | 8656 | 62646 | 55 | 73 | 1303 | 129 | 13 | OM | 270 | 72875 |
| 7/24/85 | | TRACE | 4291 | 65267 | 61 | 90 | 1504 | 124 | 13 | ND OH | 288 | 71350 |
| 7/07/86 | | 20 | 1248 | 66093 | 84 | 124 | 1738 | 149 | 18 | NO | 395 | 69474 |
| 5/27/87 | | NO | 4331 | 80831 | 89 | 130 | 1787 | 174 | 12 | CM | 405 | 87354 |
| 5/04/83 | | Ю | 9078 | 95987 | 92 | 118 | 1779 | 176 | 21 | ND | 407 | 107251 |
| 5/11/89 | | 39 | 989 | 81607 | 113 | 167 | 2091 | 225 | 19 | DM | 562 | 85251 |

RECOMMENDATION

* COMMENTS

1 \$

RETEST 1 YEAR

* B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME.

KVA

PRI

SEC

13,800

2,400

9/74 RE-REFINE

400/30

HOSE LENGTH

ENERGIZED

POWER V/A

TOP INSPECTION PLATE

1.00 IN

1.00 IN

CUST CERRO COPPER PRODUCTS 5/14/89 E ST LOUIS IL 07320000 CATE PRINTED SUB NAME EXTRUSION BAY GROUND OTHER LOCATION NAMEPLATE DATA **ADDITIONAL EQUIPMENT** TRANSFORMER MFG. EQUIP TYPE RADIATORS CONSERVATORS NO NO OA. DATE MEG TRANS CLASS FANS LTC COMP 3328402 4.10% NO TOP S/N IMPEDANCE H₇0 COOLED BUSHING LOC 1/60 100 FEET 500 N·1

OIL PUMPS

BOTTOM FPV

OTHER ACCESS

TOP FPV

VISUAL INSPECTION

PHASE/CYCLE

LIQUID TYPE

GAL LIQUID

PAINT CONDITION

LEAKS

FAIR

NONE

OIL

188

FIELD SERVICE

7/83 RE-REFINE

LIQUID SCREEN TEST DATA

DATE SERVICE LEVEL **TEMP** ACID IFT DIEL COLOR VISUAL SEDIMENT SP. GR. . 9/00/81 .050 35.0 AC 44 AC 2.00 AC 0.880 CLEAR NONE 32.6 47 6/00/82 .070 AC AC 2.00 AC 0.880 AC CLEAR NONE 30.2 QU CLEAR NONE 4/27/83 NORMAL 42 C .060 41 2.00 0.880 7/14/83 NORHAL .020 AC 44.0 AC 44 AC 0.890 AC CLEAR AC NONE 2.00 AC 38.1 5/14/84 NORHAL 40 C .040 44 0.880 SLT SEDI 2.00 AC AC AC 7/16/85 NORHAL 34 C . 030 AC 37.9 AC 44 AC 2.00 AC 0.880 CLEAR AC NONE 7107186 NORMAL 46 C .040 36.9 AC 41 AC 2.00 0.880 AC CLEAR AC NONE AC 5/27/87 NORHAL 56 C . 040 33.8 50 2.00 0.880 CLEAR AC NONE 5/04/88 NORMAL 38 C .040 AC 33.0 AC 45 0.880 AC CLEAR AC NONE AC 2.00 AC 5/11/89 LOW 40 C . 040 AC 34.1 48 2.00 AC 0.880 CLEAR AC NONE

COMMENTS TRANSFORMER OIL TEST DATA ACCEPTABLE, HOMEVER STUDIES INDICATE OXIDATION BY-PRODUCTS TRAPPED IN INSULATION.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|------------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| 10/06/80 | 52.114.152 | ND | 6969 | 78237 | 3 | 636 | 6257 | 5 | 56 | ND | 700 | 92163 |
| 9/09/81 | | NO | 4750 | 65301 | HASKED | 582 | 6305 | 5 | 57 | ОМ | 644 | 77000 |
| 6/07/82 | | ND | 11936 | 66485 | 5 | 296 | 3738 | 4 | 36 | ND | 341 | 82500 |
| 5/02/83 | | ND | 4882 | 72491 | 14 | 76 6 | 5660 | 5 | 57 | ND | 842 | 83875 |
| 5/14/84 | | DM | 24658 | 58318 | ND | 2 | 891 | TRACE | 5 | ND | 7 | 83874 |
| 7/24/85 | | ND | 13448 | 63046 | 5 | 198 | 1869 | 1 | 7 | NO | 208 | 78571 |
| 7/07/86 | | ND | 8283 | 51645 | 4 | 392 | 2907 | 1 | 19 | 80 | 416 | 63251 |
| 5/27/87 | | ND | 11376 | 69148 | 4 | 451 | 3835 | 1 | 42 | DN | 498 | 84857 |
| 5/04/88 | | TRACE | 6251 | 73452 | 8 | 611 | 4900 | TRACE | 28 | DM | 647 | 85250 |
| 5/11/89 | | 39 | 4158 | 8375€ | 14 | 925 | 4665 | 5 | 39 | סא | 922 | 93501 |

RECOMMENDATION

COMMENTS

RETEST 6 MONTHS * C-THE DETECTION OF CARBON MONDXIDE INDICATES OVERHEATING OF THE CELLULOSIC INSULATION. PROBABLE CAUSES FO

CONDITION ARE: OVERLOADING THE TRANSFORMER FOR AN EXTENDED PERIOD OF TIME, OVERHEATED JOINTS, OR CORDNA.

*

KEY TO ABBREVIATIONS: AC - ACCEPTABLE QU - QUESTIONABLE UN - UNACCEPTABLE

P 0 50X 4724, AKRON, OH 4431;

0032

CUST CERRO COPPER PRODUCTS CITY SUB NAME EXTRUSION BAY UNIT # 1035

E ST LOUIS IL

OTHER

10 # 07320000 CATE PRINTED

6/14/39

OUTDOOR/GROUND LOCATION

| _ | NA | MEPLATE DATA | tempokan kana maga sengan pengangan pengangan pengangan pengangan pengangan pengangan pengangan pengangan pen | - | ADDITIONAL | L EQUIPMENT | • |
|------|---------|--------------|---|-------------------------|-----------------|--------------|----------|
| MFG. | AC | EQUIP. TYPE | TRANSFORMER | RADIATORS | YE5 | CONSERVATORS | NO |
| DATE | MFG | TRANS CLASS | 0A | FANS | 40 | LTC COMP | NO |
| S/N | 3328403 | IMPEDANCE | 4.10% | H ₂ O COOLED | 1 10 | BUSHING LOC | TOP |
| KVA | 500 | PHASE/CYCLE | 1/60 | OIL PUMPS | NO | HOSE LENGTH | 100 FEET |
| PRI | 13,800 | LIQUID TYPE | OIL | TOP FPV | 1.00 IN | ENERGIZED | |
| SEC | 2,400 | GAL LIQUID | 138 | 80TTOM FPV | 1.00 IN | POWER V/A | 400/30 |
| | | | | OTHER ACCESS | TOP INSPECTI | ON PLATE | |

VISUAL INSPECTION

PAINT CONDITION G000

LEAKS

NONE

FIELD SERVICE

9/74 RE-REFINE

10/86 RE-REFINE

LIQUID SCREEN TEST DATA

| DATE | SERVICE | LEVEL | TEMP | P/V | ACID | | IFT | | DIEL | • | COLOR | | SP. GR. | | VISUAL | | SEDIMENT | |
|---------|---------|--------|------|-----|-------|----|------|----|------|----|-------|----|---------|----|--------|----|----------|---|
| 9/00/8: | ı | | | | . 050 | AC | 34.1 | AC | 50 | AC | 2.00 | AC | 0.880 | 3A | CLEAR | AC | NONE | A |
| 6/00/8 | 2 | | | | .060 | QU | 34.4 | AC | 50 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE | A |
| 4/27/8 | 3 | NORMAL | 43 0 | ; | .040 | AC | 32.6 | AC | 41 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE | A |
| 5/14/8 | 4 | NORMAL | 40 (| : | . 050 | AC | 30.3 | QU | 44 | AC | 2.00 | AC | 0.880 | AC | | | SLT SEDI | Q |
| 7/16/8 | 5 | NORMAL | 34 (| ; | .040 | AC | 30.1 | QU | 43 | AC | 2.00 | AC | 0.885 | AC | CLEAR | AC | NONE | A |
| 7/07/8 | 6 | NORMAL | 47 (| : | .050 | AC | 28.9 | QU | 39 | AC | 2.00 | AC | 0.880 | AC | CLEAR | AC | NONE | A |
| 10/30/8 | 6 PROOF | | | | . 020 | AC | 39.6 | AC | 49 | AC | 1.50 | AC | 0.880 | AC | CLEAR | AC | NONE | A |
| 5/27/8 | 7 | HIGH | 53 (| : | . 020 | AC | 37.9 | AC | 50 | AC | 1.50 | AC | 0.880 | AC | CLEAR | AC | NONE | A |
| 5/04/8 | 8 | NORMAL | 38 (| : | .030 | AC | 36.0 | AC | 44 | AC | 1.50 | AC | 0.880 | AC | CLEAR | AC | NONE | A |
| 5/11/8 | 9 | NORNAL | 40 (| : | . 030 | AC | 37.5 | AC | 40 | AC | 1.50 | AC | 0.875 | AC | CLEAR | AC | NONE | A |

COMMENTS TRANSFORMER OIL TEST DATA ACCEPTABLE, HOWEVER STUDIES INDICATE OXIDATION BY-PRODUCTS TRAPPED IN INSULATION.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|---------|----------|--------|----------|---------|--------------------|-------------------|---------|----------|-----------|----------------------|--------------|
| UATE | SEMAICE | THUNOGEN | OXIGEN | MINROGEN | MEINANE | MICHONIDE | DIGNIDE | CIMMINE | CINTLENE | ACEITLENE | COMBOSTIBLE | UAS |
| 10/06/80 | | ND | 5362 | 71256 | 8 | 753 | 7791 | 6 | 75 | DM | 842 | 85251 |
| 9/09/81 | | DM | 3864 | 65895 | 8 | 623 | 6555 | 4 | 51 | ND | 686 | 77000 |
| 6/07/82 | | ND | 7738 | 67345 | 6 | 445 | 5389 | 4 | 47 | DN | 502 | 80974 |
| 5/02/83 | | ND | 6252 | 71503 | 10 | 605 | 5117 | 3 | 53 | ND | 671 | 83543 |
| 5/14/84 | | MD | 14101 | 62793 | ND | 348 | 5182 | 8 | 69 | ND | 425 | 82501 |
| 7/24/85 | | TRACE | 1953 | 75555 | 15 | 710 | 8129 | 6 | 60 | ND | 791 | 86428 |
| 7/07/86 | | 12 | 4243 | 70455 | 12 | 638 | 7087 | 12 | 41 | ND | 715 | 82500 |
| 5/27/87 | | DM | 17504 | 68112 | ОМ | 121 | 1104 | NO | TRACE | ND | 121 | 86841 |
| 5/04/88 | | TRACE | 12555 | 61728 | TRACE | 280 | 2425 | מא | 13 | GM | 293 | 77001 |
| 5/11/89 | | 17 | 8657 | 59595 | 7 | 418 | 2782 | 1 | 53 | DM | 466 | 71500 |

RECOMMENDATION * COMMENTS

* B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME. RETEST 1 YEAR

KEY TO ABBREVIATIONS: AC - ACCEPTABLE QU - QUESTIONABLE UN - UNACCEPTABLE

0033

CUST CERRO COPPER PRODUCTS

SUB NAME EXTRUSION BAY

CITY UNIT#

E ST LOUIS IL

1036

OTHER

10 # 07320000 CATE PRINTED

LOCATION

OUTDOOR/GROUND

| | # # # # A # A # A # A # A # A # A # A # | The State of the S | · Survey of Agreement | the state of the | Mary thank the contract | _{के जि} ल्लाहरू |
|--|---|--|--|--|--|--------------------------|
| MFG. AC DATE MFG. S/N 3328401 KVA 500 PRI 13,800 SEC 2,400 | NAMEPLATE DATA EQUIP. TYPE TRANS CLASS IMPEDANCE PHASE/CYCLE LIQUID TYPE GAL LIQUID | TRANSFORMER OA 4.10% 1/60 OIL 188 | RADIATORS FANS H ₂ 0 COOLED OIL PUMPS TOP FPV BOTTOM FPV OTHER ACCESS | ADDITIONA YES NO NO NO 1.00 IN 1.00 IN | CONSERVATORS LTC COMP BUSHING LOC HOSE LENGTH ENERGIZED POWER V/A TION PLATE | |

VISUAL INSPECTION

PAINT CONDITION COOD

LEAKS

NONE

9/74 RE-REFINE

FIELD SERVICE 10/86 RE-REFINE

| | | | | | |
|------|---|--|--|--|--|
| | Burn Late Value of the Address of the Address | and the state of t | and the same of th | A | |
| | | | | The back of the control of the contr | |
| | and the company of the company of | TARES THE PROPERTY OF THE PARTY | | | ラーマルス 新たって かいんけん かべい メント・ |
| | くて せんておしかいしょう かず モ じつり | | CONCESS TECT DAT | ALC: NO PERSON NAMED IN COLUMN TO PERSON NAM | |
| | | | SCREEN LEST DAT | | DED to the second of the second of the second of |
| | | | | | |

| DATE SERVICE LEVEL | TEMP PAY | | Dita | COLOR SP. 6 | TE VISUAL TE |
|--------------------------------|--|---|--|--|--|
| | | | | | |
| F100185 | Transfer of the control of the contr | | IN SERVICE SER | | |
| 4/27/83 MORNA 5/14/84 MORNA | | | | | A STATE OF THE PARTY OF THE PAR |
| 7/14/85 200KA | | | U ZA FACE | | |
| 7/07/86 5 NORNA | | | UNITAL | THE RESERVE OF THE PARTY OF THE | |
| 19/30/86 PROOF | | 《美国》,"大学的一个人,不是一 | C. THE FACE OF | The Law of The Control of the Control | |
| 3/27/87 HIGH | | | | | |
| -3/94/88 - 1 4 NORHA | | | | | |
| 3/11/89 AMORNA | | 30 AC 36 8 | IF RUITE | 11 50 S. KC2 10 BT | ACE SELEMEN |
| | | | | | |

OHNENTS TRANSFORMEN UIL TEST DATA ICCEPTABLE MONEVER STUDIES INDICATE DXIDATION BY-PRODUCTS TRAPPED IN INSULATIO

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | | UVBBBBB | AVVCEN | NUTDOCCU | METHANE | CARBON | CARBON | 57 11 4 11 7 | 571114 FMF | | TOTAL | TOTAL |
|----------|---------|----------|--------|----------|---------|----------|---------|-----------------------------------|------------|-----------|----------------|-------|
| UATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | MEIHANE | MONOXIDE | DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | COMBUSTIBLE | GAS |
| 10/06/80 | | - 9 | 6459 | 70706 | 15 | 764 | 8590 | 6 | 75 | DM | 869 | 86624 |
| 9/09/81 | | 12 | 6207 | 63734 | 5 | 522 | 6454 | 4 | 63 | OM | 606 | 77001 |
| 6/07/82 | | ND | 11045 | 67899 | 4 | 359 | 4592 | 3 | 46 | DM | 412 | 83948 |
| 5/02/83 | | ND | 8167 | 70360 | 8 | 589 | 5428 | 3 | 60 | DM | 660 | 84615 |
| 5/14/84 | | ND | 16380 | 61385 | TRACE | 204 | 4462 | 7 | 63 | סא | 274 | 82501 |
| 7/24/85 | | TRACE | 3168 | 68520 | 12 | 722 | 7648 | 6 | 67 | DM | 807 | 80143 |
| 7/07/86 | | 16 | 1618 | 64963 | 16 | 806 | 9500 | 16 | 65 | ND | 919 | 77000 |
| 5/27/87 | | DM | 13433 | 50468 | TRACE | 90 | 1139 | MD | 3 | ND | 9 3 | 65133 |
| 5/04/88 | | MD | 10924 | 49857 | 2 | 181 | 2271 | TRACE | 15 | ND | 198 | 63250 |
| 5/11/89 | | 17 | 12114 | 67030 | 6 | 349 | 2962 | 2 | 20 | CM | 394 | 82500 |

RECOMMENDATION

* COMMENTS

RETEST 1 YEAR

B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME.

SC 0034

CUST CERRO COPPER PRODUCTS

SUB. NAME BLDG 90

CITY

UNIT #

E ST LOUIS IL

. 3, 20013 12

OTHER

ID # 07320000 DATE PRINTED

LOCATION

DATE PRINTE
OUTDOOR/GROUND

6/14/89

| | NAM | EPLATE DATA | | | ADDITIONAL | . EQUIPMENT | ſ |
|--------|--------------|-------------|-------------|--------------|--------------|--------------|------|
| MFG. | WESTINGHOUSE | EQUIP. TYPE | TRANSFORMER | RADIATORS | YES | CONSERVATORS | МО |
| DATE M | IFG. | TRANS CLASS | OA | FANS | NO | LTC COMP | Ю |
| S/N | SAV363801 | IMPEDANCE | 8.04% | H+O COOLED | NO | BUSHING LOC | TOP |
| KVA | 2,500 | PHASE/CYCLE | 3/60 | OIL PUMPS | NO | HOSE LENGTH | 100 |
| PRI | 13,800 | LIQUID TYPE | OIL | TOP FPV | 1.00 IN | ENERGIZED | YES |
| SEC | 4,160 | GAL LIQUID | 521 | 80TTOM FPV | 1.00 IN | POWER V/A | 400/ |
| | | | | OTHER ACCESS | TOP INSPECTI | ON PLATE | |

VISUAL INSPECTION

PAINT CONDITION

LEAKS

FAIR

NONE

FIELD SERVICE

3/79 RE-REFINE

| | The state of the s | Carried Control of the Control of th | | Ò |
|---|--|--|---|----|
| | LIQUID SCREEN TEST | DATA | | |
| | | THE RESERVE TO SERVE THE PARTY OF THE PARTY | GR. A. ANI-VISUAL SEDIMEN | 7 |
| | | | | |
| 9100180 | 40 AC \$ 84.9 AC \$ 44.1 | AC TRACE OF AC 5.0. | 870 AC CLEAR MC EN HONE | 3 |
| 9/00/81 | 40 AC = 36 1 AC = 41 S | CERTIFICATION. | BTO : AC STEAD AC STEADERS | ž. |
| 6/00/82 | 40 . K . 40 . 0 . K . 44 . | ACCEPTED TO ACCEPT | 880 AC CLEAR ACTION | |
| | | | BO TAC TELLAR IC TO OR | |
| | | | BBO SAC STEAM AND | |
| | | | 890 AG CULAR /C COM | |
| | | | BRO AC / CLEAR VAC TO HORE | |
| 5/27/87 NORHAL 40 C 1.0 | | | | |
| 45/04/88 NORHAL 80 C 0.5 | | | | |
| 5/11/89 NORHAL 25 C . 0.5 | | | | |
| | | | | t |
| COMMENTS TRANSFORMER DIL TEST DATA ACCEPTABL | E HOVEVER STUDIES INDIC | ATE OXIDATION BY-PRODUC | TS TRAPPED IN INSULATION | į, |
| The same area and the same and | A SECTION ASSESSMENT OF THE PARTY OF THE PAR | | | 50 |

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| | | | | | | CARBON | CARBON | | | | TOTAL | TOTAL |
|----------|---------|----------|--------|----------|---------|----------|---------|--------|----------|-----------|-------------|--------|
| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | MONOXIDE | DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | COMBUSTIBLE | GAS |
| 10/05/80 | | DM | 15195 | 73663 | ND | 219 | 4946 | ND | 3 | DM | 555 | 94026 |
| 9/09/81 | | MD | 12376 | 59675 | TRACE | 308 | 4634 | HD | 6 | ND | 314 | 76999 |
| 6107182 | | ND | 16935 | 63170 | ND | 273 | 5004 | ND | 13 | ND | 286 | 85395 |
| 5/02/83 | | ND | 17188 | 68443 | 5 | 368 | 5644 | 1 | 17 | ND | 391 | 91666 |
| 5/14/84 | | ND | 21846 | 66431 | ND | 10 | 2449 | 5 | 12 | ON | 24 | 90750 |
| 7/24/85 | | TRACE | 14919 | 66394 | 7 | 661 | 9134 | 1 | 26 | MD | 695 | 91142 |
| 7/87/86 | | 12 | 17485 | 68965 | 4 | 565 | 9182 | 1 | 37 | OM | 619 | 96251 |
| 5/27/87 | | DM | 18932 | 70585 | 9 | 551 | 10930 | 5 | 72 | DM | 634 | 101081 |
| 5/04/88 | | TRACE | 14351 | 57170 | 8 | 540 | 7658 | 1 | 22 | ND | 571 | 79750 |
| 5/11/89 | | 27 | 25563 | 68914 | 10 | 345 | 6848 | 3 | 40 | KD | 425 | 101750 |

RECOMMENDATION

. .

RETEST 1 YEAR

B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IN THE COMBUSTIBLE GAS VOLUME.

KEY TO ABBREVIATIONS: AC - ACCEPTABLE QU - QUESTIONABLE UN - UNACCEPTABLE

0035

CUST CERRO COPPER PRODUCTS

SUB. NAME HAIN HILL UNIT #

E ST LOUIS IL

OTHER EX.COVER

10 # 07320000

LOCATION

DATE PRINTED **CUTDOOR/GROUND**

5/14/89

| Copy and | لم كماليدي برياسه | State of the state of | 4.10人是在10人的人。 | 《 10 10 10 10 10 10 10 10 10 10 10 10 10 | St. Comment | · · · · · · · · · · · · · · · · · · · | |
|----------|-------------------|-----------------------|---------------|--|-------------|---------------------------------------|---------------|
| | NAM | EPLATE DATA | | | ADDITI | ONAL EQUIPMENT | , |
| MFG. | WESTINGHOUSE | EQUIP. TYPE | TRANSFORMER | RADIATORS | YES | CONSERVATORS | Ю |
| DATE I | AFG. | TRANS CLASS | GA | FANS | NO | LTC COMP | NO |
| S/N | PBV083001 | IMPEDANCE | 7.69% | H ₂ 0 COOLED | NO | BUSHING LOC | SIDE ENCLOSED |
| KVA | 1,500 | PHASE/CYCLE | 3/60 | OIL PUMPS | МО | HOSE LENGTH | 50 FEET |
| PRI | 13,800 | LIQUID TYPE | OIL | TOP FPV | 1.00 IN | ENERGIZED | YES |
| SEC | 480 | GAL LIQUID | 294 | BOTTOM FPV | 1.00 IN | POWER V/A | 400/30 |
| | | | | OTHER ACCESS | | | |

VISUAL INSPECTION

PAINT CONDITION

LEAKS

G000

NONE

FIELD SERVICE

3/84 PCB GONE

8/84 PC8 CONE

8/86 FIELD SERVICE

| z | - | | • | vı | | ~ | | ER. | 16 | J. | | ~ " | • |
|---|----|-----|-----|------|------|------|-------|-----|-------|-----|------|-----|-----|
| q | э | 244 | Hi. | e 3. | مدسد | CHA. | نتعاث | 99 | B-1-4 | حت | | | 10. |
| ٥ | σ. | 23 | 7 | шz | 3.0 | | 45 | | . 66 | -34 | 4 11 | - | |

| | | | | | - And The State of |
|--|--|--|--|---|--|
| DATE SERVICE LEVEL | ATEMP - PIV - AC | ID THE PERSON | SEA DELTA | COLOR SPECR | VISUAL DATE |
| 4/27/83 NORHAL | 40 C # /1 5 . V # | 050 AC 3 30 1 A | U SP AC SO SEL | 1.50 AC E. 888 | AC TICLEMENCE |
| 3/15/84 | | 020 AC 2.45.5 FA | CHARLES TO SHE | E DA FAC E D BOO | Concilly (C. |
| 5/14/84 NORHAL | WHELL OF STREET | | | | |
| 0/20/84 | | | | | |
| プログラー・アンド 大学 大学 (大学) またました (大学) | | | | | |
| the state of the s | 45 C 0 0 . | is the second of | ラング・ファイル・ディー・ディー・ディー・ディー・ディー・ディー・ディー・ディー・ディー・ディー | A SECURE OF THE PERSON OF THE | K CLUSTE |
| and the second s | 4.C. 21.1 | | and the second s | 1.10 TAC 7. 1. 880. | AC CLEAR AC |
| 8/05/86 PROOF | | 020 TAC 237 0 ZA | THE PLANT | LIE ACAS DE | ACTO CLEAR & MC |
| 3/27/87 HORNAL | | 030 AC 40 1 1A | TO VALUE OF | 2 10 740 7 181 | AC CLEAR TA |
| | Section | | | | |
| The said of the control of the contr | and the second s | are the second of the second o | | | AND THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER. |
| 3/3/11/07 THE RUNNING | 25 C. 113 (C. | 134 CM (100) | TO THE PARTY | | 1. E 1. E. J. J. J. E. |

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|---------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| ONIL | SCHAICE | HIDDOGEN | UNITER | MITHOGEN | METHANE | MONONIDE | DIUNIUE | EINANE | EINTLENE | ACETTLENE | COMBOSTIBLE | UAS |
| 10/06/80 | | MD | 27150 | 63987 | 1 | 20 | 967 | MD | DIA | DM | 21 | 92125 |
| 9/09/81 | | NO | 24880 | 56948 | DM | 6 | 666 | ND | DM | MD | 6 | 82500 |
| 6/07/82 | | MD | 53308 | 64173 | ND | 10 | 509 | ND | ND | ND | 10 | 88000 |
| 5/02/83 | | MD | 26657 | 58904 | 1 | . 8 | 457 | ND | MD | - ND | 9 | 86027 |
| 5/14/84 | | MD | 24811 | 55958 | ND | MD | 356 | MD | ND | DN | ND | 81125 |
| 7/24/85 | | MD | 29478 | 64551 | ND | 56 | 819 | ND | OM | СМ | 56 | 94874 |
| 7/07/86 | | MD | 23388 | 50047 | TRACE | 21 | 793 | ND | ND | MD | 21 | 74249 |
| 5/27/87 | | DM | 20445 | 78173 | 3 | 207 | 2252 | 1 | 1 | CM | 212 | 101082 |
| 5/04/88 | | TRACE | 13894 | 64041 | 3 | 361 | 4201 | ND | TRACE | ND | 364 | 82500 |
| 5/11/89 | | 41 | 11874 | 73563 | 10 | 648 | 4607 | 2 | 4 | ND | 705 | 90749 |

RECOMMENDATION * COMMENTS

RETEST & MONTHS * C-THE DETECTION OF CARBON MONOXIDE INDICATES OVERHEATING OF THE CELLULOSIC INSULATION. PROBABLE CAUSES FO

* CONDITION ARE: OVERLOADING THE TRANSFORMER FOR AN EXTENDED PERIOD OF TIME, OVERHEATED JOINTS, OR CORONA.

OTHER

0034

CUST CERRO COPPER PRODUCTS

SUB NAME #2 HILL

UNIT #

E ST LOUIS IL

EX.COVER

07320000

6/14/89 CATE PRINTED

OUTDOOR/GROUND LOCATION

| 7.7 | | • 7745 (\$4) | | and the second of the second of the second of | | A CANADA TO THE STREET | |
|------|--------------|--------------|-------------|---|-------------|------------------------|---------|
| • | NAM | EPLATE DATA | | | ADDITIONA | L EQUIPMENT | • |
| MFG. | WESTINGHOUSE | EQUIP. TYPE | TRANSFORMER | RADIATORS | YES | CONSERVATORS | NO |
| DATE | MFG. | TRANS CLASS | OA | FANS | NO | LTC COMP | Ю |
| S/N | 5AV435901 | IMPEDANCE | 6.161 | H ₇ 0 COOLED | МО | BUSHING LOC | TOP |
| KVA | 2,500 | PHASE/CYCLE | 3/60 | OIL PUMPS | NO | HOSE LENGTH | 50 FEET |
| PRI | 13,800 | LIQUID TYPE | OIL | TOP FPV | 1.00 IN | ENERGIZED | YES |
| SEC | 480 | GAL LIQUID | 389 | BOTTOM FPV | 1.00 IN | POWER V/A | 400/30 |
| | | | | OTHER ACCESS | TOP INSPECT | ION PLATE | |

VISUAL INSPECTION

PAINT CONDITION

FAIR

LEAKS

NONE

FIELD SERVICE

3/84 PCB GONE

8/84 PCB GONE

8/86 FIELD SERVICE

| SERVICE LEVE | E TANKER IEM | PARKET | ACID 49 | HER SELFT! | A POST | | ECOLOR SELM | 25P.20GR.792 | HAYAH VISUAL BARBA |
|--------------|--------------|--|--------------------------|--|------------|--|------------------|--|--------------------|
| HOR | WL 239 | 1:223 | 3140 5 | AC :130. | 新加州 | E AL SEE | EL DO AC | 0.880 M | O CLEAN ACT |
| | | | 35 929 1 | CAL | LAC E | | | 9 980 A | No. of the last |
| I NOR | WL 139 | C 4 1 | 25 980 X | E at | | 3 13 | | | |
| | 6.61 | | (132) | E ATT | | Territoria de la companya della companya della companya de la companya della comp | 34 D. 4 B | 18.00 A | THE COLUMN |
| S HOR | IA CONT | CALL | 980 2 | | Y L | E VIE | 3 | FED | |
| 5 NOR | W 751 | G OC | FE 191 2 | C | 3 (6.7) | THE SALE | A COLLE | 9 884 - A | |
| S PROOF | | | | Committee of the Commit | | | | 3 160 - 1 | |
| 7 HICH | 10 | r (1):0-7 | . J. 030 | AC 22 25 | VAC AL | THE STATE | | 18 88 TA | E-1110 |
| | NOR | NORMAL 20 NORMAL | NORMAL TIC REMARKS FROOT | | | CORNAL 7 G 7 N 130 K 3 K 1 | FROOT POOL 19 C | ROUNCE TO BE CONTROL TO SELECT TO SE | |

LIQUID SCREEN TEST DATA

HORMAL 4888 C 21 0-208 FAC 1888 2 AC 1849 AC

COMMENTS TRANSFORMER OILZIEST DATA ACCEPTABLE HOMEVER STUDIESTO DOTCATE O TOATE OF THE PROPERTIES OF A PROPERTIES OF THE
GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| | | | | | | CARBON | CARBON | | | | TOTAL | TOTAL |
|----------|---------|----------|--------|----------|---------|----------|---------|--------|----------|-----------|-------------|--------------------|
| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | MONOXIDE | DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | COMBUSTIBLE | GAS |
| 10/06/80 | | OM | 1746 | 76501 | 42 | 117 | 4018 | 73 | 4 | MO | 236 | 82501 |
| 9/09/81 | | ND | 3948 | 66941 | 29 | 90 | 3180 | 58 | 3 | MD | 180 | 74249 |
| 6/07/82 | | CM | 6237 | 56818 | 17 | 48 | 1969 | 41 | 1 | DM | 107 | 65131 |
| 5/02/83 | | ND | 4460 | 70321 | 31 | 71 | 2608 | 65 | TRACE | MD | 167 | 77556 |
| 5/14/84 | | ND | 22218 | 56520 | 3 | 29 | 971 | 7 | 2 | MD | 41 | 79750 |
| 7/24/85 | | TRACE | 10791 | 52719 | 4 | 338 | 2135 | 7 | 5 | ND | 354 | 65 99 9 |
| 7/07/86 | | 13 | 12896 | 65976 | 4 | 540 | 3052 | 6 | 15 | ND | 578 | 82502 |
| 5/27/87 | | ОМ | 10420 | 55294 | 3 | 259 | 2044 | 2 | 5 | OM | 269 | 68027 |
| 5/04/88 | • | TRACE | 9438 | 60713 | 6 | 415 | 3652 | 4 | 53 | OM | 448 | 74251 |
| 5/11/89 | | 41 | 7107 | 65563 | 10 | 688 | 3566 | 3 | 22 | ОN | 764 | 77000 |

RECOMMENDATION

化电阻 海姆

* CONHENTS

RETEST 6 MONTHS * C-THE DETECTION OF CARBON MONOXIDE INDICATES OVERHEATING OF THE CELLULOSIC INSULATION. PROBABLE CAUSES FG

CONDITION ARE: OVERLOADING THE TRANSFORMER FOR AN EXTENDED PERIOD OF TIME, OVERHEATED JOINTS, OR CORONA.

CUST CERRO COPPER PRODUCTS

240

PRI

SEC

P.O. 80X 4724, AKRON, OH 44310

400/40

DATE PRINTED

ENERGIZED

POWER V/A

CLEAR

6/14/89

97320000

.50 IN

SUB NAME BLOG 80 PADMOUNT #1307 1" PLUG OUTDOOR/GROUND UNIT # OTHER LOCATION NAMEPLATE DATA ADDITIONAL EQUIPMENT TRANSFORMER GE YES NO MFG. **EQUIP. TYPE RADIATORS CONSERVATORS** OA 40 NO DATE MEG TRANS CLASS **FANS** LTC COMP J930828T71A4 1.80% Ð H_z0 COOLED IMPEDANCE **BUSHING LOC** 300 3/60 100 FEET KVA PHASE/CYCLE OIL PUMPS HOSE LENGTH OIL 2,400 YES .50 IN PLUG

TOP FPV

BOTTOM FPV

OTHER ACCESS

VISUAL INSPECTION

LIQUID TYPE

GAL LIQUID

PAINT CONDITION FAIR

LEAKS NONE

145

E ST LOUIS IL

CITY

FIELD SERVICE

3.9/00/81° \$100182 4/27/83 7/13/84 T/16/85 77/07/86

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| | | | | | | CARBON | CARBON | | | | TOTAL | TOTAL |
|----------|---------|----------|--------|----------|---------|----------|---------|--------|----------|-----------|-------------|-------|
| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | MONOXIDE | DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | COMBUSTIBLE | GAS |
| 10/06/80 | | · ND | 9143 | 76770 | 2 | 761 | 3950 | 1 | 48 | ND | 812 | 90675 |
| 9/09/81 | | ND | 7485 | 62851 | HASKED | 594 | 3281 | 1 | 39 | ND | 634 | 74251 |
| 6/07/82 | | - ND | 10274 | 65303 | 3 | . 447 | 2515 | MO | 29 | ND | 479 | 78571 |
| 5/02/83 | | ND | 5505 | 67018 | 9 | 789 | 3927 | 3 | 47 | MD | 848 | 77298 |
| 7/13/84 | | ND | 9198 | 64825 | ND | 598 | 2345 | 1 | 32 | OM | 631 | 76999 |
| 7/24/85 | | ND | 5415 | 72236 | 9 | 771 | 4034 | 2 | 34 | MD | 816 | 82501 |
| 7/07/86 | | ND | 3109 | 66322 | 11 | 751 | 4004 | 3 | 50 | ND | 815 | 74250 |
| 5/27/87 | | ND | 1818 | 74867 | 15 | 954 | 4786 | 2 | 58 | ND | 1029 | 82500 |
| 5/04/88 | | TRACE | 3505 | 70698 | 14 | 840 | 4626 | 5 | 61 | ND | 920 | 79749 |
| 5/11/89 | | 49 | 2029 | 85745 | 24 | 1179 | 4414 | 4 | 57 | ND | 1313 | 93501 |
| | | | | | | | | | | | | |

RECOMMENDATION * COMMENTS

RETEST & MONTHS * C-THE DETECTION OF CARBON HONOXIDE INDICATES OVERHEATING OF THE CELLULOSIC INSULATION. PROBABLE CAUSES FC

CONDITION ARE: OVERLOADING THE TRANSFORMER FOR AN EXTENDED PERIOD OF TIME, OVERHEATED JOINTS, OR CORONA.

TRANSFORMER CONSULTANTS A DIVISION OF S.D. MYERS INC.

CUST CERRO COPPER PRODUCTS CITY

- 1 BGX 4704, AXR6M 08 44315

5C 7

6/14/89

OTHER EX.COVER SUB NAME EXTRUSION BAY UNIT # LCCATION CUTOGOR/SROUND NAMEPLATE DATA **ADDITIONAL EQUIPMENT** TRANSFORMER YE5 WESTINGHOUSE MFG. EQUIP. TYPE CONSERVATORS RADIATORS ΘA 40 ŪЙ DATE MFG TRANS CLASS FANS LTC COMP 58988090101 5.50% 40 SIDE ENCLOSED MPEDANCE H-0 COOLED **BUSHING LOC** 1,500 3/60 ii0 100 FEET KVA PHASE/CYCLE OIL PUMPS HOSE LENGTH 13,800 ΰIL 1.00 IN YES LIQUIO TYPE TOP FPV PRI ENERGIZED 1 00 IN 400/30 2,300 213 SEC **GAL LIQUID BOTTOM FPV** POWER V/A

VISUAL INSPECTION

PAINT CONDITION
G009

LEAKS NONE

E eT 10013 70

FIELD SERVICE

TOP INSPECTION PLATE

OTHER ACCESS

D# 37520000 CATE PRINTED

LIQUID SCREEN TEST DATA

| DATE SERVICE | LEVEL | TEMP | P/V | ACID | | IFT | | DIEL | | COLOR | | SP. GR. | | VISUAL | | SEDIMENT |
|--------------|--------|------|-----|-------|-----|------|----|------|----|-------|----|---------|----|--------|----|----------|
| - 9/00/80 | NORMAL | 20 C | 1.0 | . 020 | AC | 37.7 | AC | 48 | AC | 0.50 | AC | 0.870 | AC | CLEAR | AC | NONE |
| 9/00/81 | NORMAL | 35 C | 1.0 | . 040 | AC. | 36.4 | AC | 50 | AC | 0.50 | AC | 0.860 | AC | CLEAR | AC | NONE |
| 6/00/82 | NORMAL | 40 C | 1.5 | .030 | AC | 35.7 | AC | 44 | AC | 0.50 | AC | 0.860 | AC | CLEAR | AC | NONE |
| 4/27/83 | NORMAL | | 1.5 | . 030 | AC | 34.9 | AC | 40 | AC | 0.75 | AC | 0.870 | AC | CLEAR | AC | NONE |
| 5/14/84 | NORHAL | 36 C | 0.7 | .040 | AC | 34.3 | AC | 41 | AC | 1.00 | AC | 0.870 | AC | CLEAR | AC | NONE |
| 7/16/85 | NORHAL | 40 C | 2.0 | . 030 | AC | 33.9 | AC | 42 | AC | 0.75 | AC | 0.875 | AC | CLEAR | AC | NONE |
| 7/07/86 | NORMAL | 50 C | 2.5 | . 040 | AC | 33.5 | AC | 43 | AC | 0.75 | AC | 0.870 | AC | CLEAR | AC | NONE |
| 5/27/87 | NORMAL | 45 C | 2.0 | . 040 | AC | 33.5 | AC | 50 | AC | 0.50 | AC | 0.870 | AC | CLEAR | AC | NONE |
| 5/04/88 | NORMAL | 25 C | 1.5 | . 040 | AC | 32.7 | AC | 39 | AC | 1.00 | AC | 0.870 | AC | CLEAR | AC | NONE |
| 5/11/89 | NORMAL | 39 C | 1.0 | 040 | AC | 33.7 | AC | 46 | AC | 1.00 | AC | 0.870 | AC | CLEAR | AC | NONE |

COMMENTS TRANSFORMER OIL TEST DATA ACCEPTABLE, HOWEVER STUDIES INDICATE OXIDATION BY-PRODUCTS TRAPPED IN INSULATION.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|----------|---------|----------|--------|----------|---------|--------------------|-------------------|----------|----------|-----------|----------------------|--------------|
| 10/05/80 | | OM | 15522 | 74700 | 1 | 22 | 430 | ND | ND | ND | 23 | 90675 |
| 9/09/81 | | DM | 13181 | 63063 | TRACE | 58 | 699 | NO | םא | ND | 58 | 77001 |
| 6/07/82 | | ND | 14338 | 64981 | OM | 55 | 758 | NO | ND | ND | 65 | 80142 |
| 5/02/83 | | ND | 14550 | 71827 | ND | 111 | 1213 | en Gr | DM | סא | 111 | 87703 |
| 5/14/84 | | ND | 22595 | 66687 | 3 | 57 | 1405 | 5 | TRACE | NO | 62 | 90749 |
| 7/24/85 | | TRACE | 12946 | 69018 | ó | 271 | 2374 | TRACE | DИ | ND | 277 | 84615 |
| 7/07/36 | | TRACE | 11470 | 62005 | 7 | 312 | 3205 | TRACE | TRACE | ND | 319 | 76999 |
| 5/27/87 | | DM | 13502 | 77008 | 9 | 386 | 3174 | TRACE | TRACE | NO | 395 | 94079 |
| 5/04/88 | | TRACE | 10567 | 70335 | 9 | 411 | 3658 | TRACE | TRACE | OM | 420 | 85250 |
| 5/11/89 | | 33 | 11211 | 83201 | 15 | 597 | 3941 | 2 | 1 | ND | 648 | 99001 |

RECOMMENDATION * COMMENTS

RETEST 6 MONTHS * C-THE DETECTION OF CARBON MONOXIDE INDICATES OVERHEATING OF THE CELLULOSIC INSULATION. PROBABLE CAUSES FC

* CONDITION ARE: OVERLOADING THE TRANSFORMER FOR AN EXTENDED PERIOD OF TIME, OVERHEATED JOINTS, OR CORONA.

*

TRANSFORMER CONSULTANTS A DIVISION OF S.D. MYERS INC.

P 3, 98% 4784 44864 34 4481

5/14/39 CUST CERRO COPPER PRODUCTS E ST LOGIS IL 0 # 07320000 DATE PRINTED OTHER EX.COVER BUTBOOR/GROUND SUB NAME BUILDING 19 UNIT # NAMEPLATE DATA **ADDITIONAL EQUIPMENT** G.Ξ. TRANSFORMER TE5 MFG. EQUIP. TYPE RADIATORS CONSERVATORS GA/FA YES ΝŪ DATE MFG LTC COMP TRANS CLASS FANS 4123762 6.01% ijŋ SIDE EMCLOSED S/N IMPEDANCE H₂O COOLED **BUSHING LOC** 50 FEST 2,500 3/60 πO KVA PHASE/CYCLE OIL PUMPS HOSE LENGTH 13,300 1.00 IN YES ΰIL PAI LIQUID TYPE TOP FPV ENERGIZED 240/40 430 339 1.20 IN SEC **GAL LIQUID BOTTOM FPV** POWER V/A OTHER ACCESS **VISUAL INSPECTION**

> PAINT CONDITION COCO

LEAKS

IONE

FIELD SERVICE

PCB CONTENT / EXPRESSED IN PPM

LIQUID SCREEN TEST DATA

| DATE SERVICE | LEVEL | TEMP | P/V | ACID | | IFT | | DIEL | L | COLOR | | SP. GR. | | VISUAL | | SEDIMENT | |
|--------------|--------|------|-----|-------|----|------|----|------|----|-------|----|---------|----|--------|----|----------|----|
| -5/14/84 | NORMAL | 40 C | 0.0 | .030 | AC | 35.3 | AC | 42 | AC | 1.50 | AC | 0.880 | AC | | | SLT SEDI | Q: |
| 7/16/85 | NORMAL | 46 C | 1.0 | . 020 | AC | 34.8 | AC | 46 | AC | 1.50 | AC | 0.880 | AC | CLEAR | AC | NONE | A(|
| 7/07/86 | HIGH | 45 C | 2.0 | .020 | AC | 36.9 | AC | 35 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | HONE | Αí |
| 5/27/87 | HICH | 45 C | 2.0 | . 020 | AC | 36.0 | AC | 50 | AC | 1.00 | AC | 0.890 | AC | CLEAR | AC | NONE | A(|
| 5/04/88 | NORAKL | 35 C | 0.5 | .020 | AC | 32.5 | AC | 41 | AC | 1.50 | AC | 0.880 | AC | CLEAR | AC | NONE | ÀC |
| 5/11/89 | NORMAL | 39 C | 0.0 | .020 | AC | 34.6 | AC | 41 | AC | 1.00 | AC | 0.880 | AC | CLEAR | AC | NONE | Ą٤ |

COMMENTS TRANSFORMER OIL TEST DATA ACCEPTABLE, HOWEVER STUDIES INDICATE OXIDATION BY-PRODUCTS TRAPPED IN INSULATION.

GAS-IN-OIL ANALYSIS / GAS CHROMATOGRAPHY EXPRESSED IN PPM

| DATE | SERVICE | HYDROGEN | OXYGEN | NITROGEN | METHANE | CARBON MONOXIDE | CARBON DIOXIDE | ETHANE | ETHYLENE | ACETYLENE | TOTAL COMBUSTIBLE | TOTAL GAS |
|---------|---------|----------|--------|----------|---------|--------------------|-------------------|--------|----------|-----------|----------------------|--------------|
| 5/14/84 | | NO | 17893 | 63669 | 9 | 29 | 869 | 8 | 25 | OM | 70 | 82500 |
| 7/24/85 | | 48 | 1488 | 74553 | 58 | 161 | 2236 | 15 | 43 | OM | 295 | 78572 |
| 7/07/86 | | 65 | 2729 | 69057 | 27 | 140 | 2170 | 14 | 47 | OM | 293 | 74249 |
| 5/27/97 | | 16 | 6377 | 71101 | 20 | 105 | 1939 | 10 | 36 | ON | 187 | 79604 |
| 5/04/88 | | 52 | 4060 | 76099 | 27 | 150 | 2069 | 12 | 32 | ND | 273 | 82501 |
| 5/11/89 | | 79 | 3531 | 81524 | 33 | 173 | 2606 | 16 | 39 | GM | 340 | 88001 |

RECOMMENDATION * COMMENTS

* B-THE ANALYSIS OF THIS SAMPLE SHOWS NO SIGNIFICANT INCREASE IF THE COMBUSTIBLE GAS WOLUME. RETEST 1 YEAR

KEY TO ABBREVIATIONS: AC - ACCEPTABLE QU - QUESTIONABLE UN - UNACCEPTABLE



DIVISION OF TRANSFORMER CONSULTANTS

9.3. 80% 4724, AKRON 38 44310

Phone: (216) 633-2666 Toll Free: (800) 321-9580

TEST SURVEY RECAP

| CUST | 97320000 | CERRO | COPPER | PRODUCTS | | E ST LOI | uis IL | | | 5/8 | 24/69 |
|------|--------------------|-------------|--------|----------|----------------|--------------|-------------|-----|------|----------|-------------------------------|
| TC# | SUBSTATION NAME | | SIZE | GALLONS | LIGUID TYPE | PCB CLASS | PCB DATE | LST | GC K | F ICP PF | F SERVICE PRODUCT |
| 4 | FOUNDRY | | 2000 | 372 | OIL | NON-PCB | 9/03/87 | AC | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 3 | STDC 30 | | 1000 | 470 | OIL | NON-PCB | 12/21/79 | AC | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 9 | NEW RECEIVING | | 1500 | 319 | OIL | HON-PCB | 6109188 | AC. | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 10 | RIA | | 3440 | 1677 | OIL | HON-PCB | 12/21/79 | AC | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 11 | RIA SWITCH COMP | ١. | | 437 | CIL | NON-PCB | 12/21/79 | AC | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 12 | 213 | | 315 | 360 | OIL | CONTAMINATED | 12/21/79 | AC | AC | | ACCEPTABLE CATA-RETEST 1 YEAR |
| 13 | RIC SPARE | | 2000 | 340 | OIL | CONTAMINATED | 12/21/79 | QU | ฉบ | | PCB REDUCTION |
| ٠. | , | | | | | | | | | | SEE GC DATA/RETEST & MONTHS |
| 14 | FOUNDRY | | 1500 | 297 | OIL | CONTANINATED | 12/21/79 | QU | AC | | PCB REDUCTION |
| 13 | FOUNDRY AIR POL | .L . | 2500 | 443 | OIL | NON-PCB | 12/21/79 | AC | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 19 | SHIPPING | | 1000 | 413 | OIL | NON-PCB | 4/18/79 | AC | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 24 | #2 HILL | | 100 | 88 | DIL | NON-PCB | 6/09/38 | QU | AC | | NEW HOT DIL CLEAN |
| 25 | #2 MILL | | 100 | 88 0 | OIL | NON-PCB | 6/09/88 | AC | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 26 | #S WILL | | 100 | 88 (| OIL | NON-PC8 | 6109188 | AC | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 30 | EXTRUSION BAY | | 375 | 776 | OIL | CONTAMINATED | 12/21/79 | AC | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 31 | EXTRUSION BAY | | 500 | 188 | OIL | NON-PC8 | 12/21/79 | AC | QU | | SEE GC DATA/RETEST & MONTHS |
| 32 | EXTRUSION BAY | | 500 | 188 | OIL | NON-PCB | 10/17/86 | AC | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 33 | EXTRUSION BAY | | 500 | 188 | GIL | NON-PCB | 10/17/86 | AC | ΑC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 34 | BLDG 80 | | 250 | 521 | OIL | CONTAMINATED | 4/18/79 | AC | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 35 | MAIN HILL | | 1500 | 294 | OIL | NON-PCS | 6/24/87 | AC | QU | | SEE GC DATA/RETEST 6 MONTHS |
| 36 | #2 HILL | | 250 | 389 | OIL | NON-PCS | 6/24/87 | AC | QU | | SEE GC DATA/RETEST 6 HONTHS |
| 37 | 8LDG 80 | | 300 | 145 | DIL | NON-PC8 | 6/23/82 | AC | QU | | SEE GC DATA/RETEST & MONTHS |
| 38 | EXTRUSION BAY | | 150 | 213 | OIL | NON-PCB | 6/23/82 | AC | QU | | SEE GC DATA/RETEST 6 MONTHS |
| 39 | BUILDING 19 | | 2500 | 339 | OIL | NO DATA | | AC | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| 40 | EXTRUSION PRESS | ; | 250 | 256 | OIL | NO DATA | | AC | AC | | ACCEPTABLE DATA-RETEST 1 YEAR |
| | | | | | | | | | | | |

P.O. BOX 4724 AKRON, OHIO

Phone: (216) 633-2666 Toll Free: (800) 321-9580

OHIO EPA ID# = OH-D053576294

CERRO COPPER PRODUCTS

CUST#- 07320000

6/20/89

BX 681

E ST LOUIS IL 62202 ATTN: MR. ROY THOMPSON

9.39.09 (618) 337-6000

* RETROFILL QUOTATION * **08036**

WE ARE PLEASED TO SUBMIT THIS RETROFILL QUOTATION FOR YOUR CONSIDERATION AND APPROVAL. FOR INFORMATION, OR TO PLACE YOUR ORDER, PLEASE CONTACT: RUSSELL WILLIAMS.

| | TC# | MFG | SERIAL | NUMBER | GALLONS | PCB-CONT | AROCLOR | PCB TEST REQD | PWR | SVC CODE |
|----|----------------|------------------------|------------------------------|--|-------------------------|------------------|--------------------------------------|---------------------|--------------------------|----------------|
| C. | 13 14 30 | WESTIN WESTIN AC | PCR 908 PAV8369 333345 | 3 TANK HOW 211 (12000 701 (1500) 1 EXTBAY 301 BLDG-8 | 1) 340 11 297 776 | 127 161 97 | 1242 1254 1242 1260 1242 | • | OFF OFF OFF OFF | 10 10 10 |

JOB COST

TOTAL

\$ 11,494

* TERMS AND CONDITIONS *

APPLICABLE TAXES ARE IN ADDITION TO QUOTED PRICE.

THIS PROPOSAL IS VALID FOR 60 DAYS.

- S.D. MYERS, INC. WILL SUPPLY REPLACEMENT OIL TO COMPLETE THE WORK DESCRIBED.
- S.D. MYERS, INC. WILL PROVIDE 60 AMP-220 OR 480 VOLT-3 PHASE POWER.
- S.D. MYERS, INC. WILL DISPOSE OF ALL PCB MATERIAL IN COMPLIANCE WITH CURRENT LOCAL, STATE, AND FEDERAL REGULATIONS.
 - * ADDITIONAL TERMS AND CONDITIONS ATTACHED *

P.O. 84718

RETROFILL GUARANTEE

S.D. Myers, Inc. guarantees that the PCB content of the finished oil will be non-PCB, per 40 CFR 761. In the unlikely event that the finished product in any or all units quoted does not meet this specification, S.D. Myers, Inc. will, at no additional charge, conduct such work as necessary to meet the quoted specifications.

This proposal guarantee is predicated on S.D. Myers, Inc. PCB content test results. In the event S.D. Myers, Inc. did not conduct the PCB tests, or the data is over 12 months old, new PCB content tests will be conducted at no additional charge. Should these new results conflict with the quoted data, S.D. Myers, Inc. reserves the right to decline any or all work quoted herein.

The quality of oil leaving our equipment will meet or exceed the following specifications:

| IFT | 38.0 dynes/cm | (min.) |
|---------------|---------------|--------|
| NN (acidity) | 0.03 mg/KOH/g | (max.) |
| Dielectric | 35kv | (min.) |
| Water Content | 15 PPM | (max.) |

TERMS & CONDITIONS

Date of Delivery: Mutual Agreement.

Terms: Net 30 days.

The laws concerning hazardous waste manifesting vary for different states and localities; therefore, it will be the customer's responsibility to provide the proper hazardous waste manifest approved by the state or governmental entity in which the work is to be performed. Questions concerning this matter may be directed to S.D. Myers, Inc.

Due to a national backlog of PCB liquid disposal, S.D. Myers, Inc. is unable to guarantee a firm date for final destruction of the materials. However, all EPA rules concerning destruction time envelopes will be satisfied.

Within two (2) weeks after the receipt of CERTIFICATE(S) of DESTRUCTION, (CD's) from an EPA-approved incinerator and/or chemical destruction process, S.D. Myers, Inc. will forward copies of the CD's to the customer as proof and record of the work performed.

S.D. Myers, Inc. reserves the right to reject any portion or all of this proposal if upon inspection our field crew determines that the environmental, operational, or safety procedures violate our standard practice.

PLEASE NOTE: S.D. Myers, Inc. guarantees are null and void on any transformer found to have been retrofilled prior to our own testing. This especially applies to askarel units.

OTHER CONDITIONS

Liability: The Contractor's obligation is limited to the work contracted for in this proposal/sales order/agreement.

In no event shall Contractor be liable for consequential, incidental, direct, or special damages or losses arising directly or indirectly from its performance under this contract except for the actual damage to property caused by the negligence of the Contractor.

S.D. Myers, Inc. will not be liable for damage to any property, vehicle, and equipment caused by the performance of the work after timely notice has been given to the Customer for removal of such property, vehicles, and equipment before the work begins.

This includes property, vehicles, and equipment owned by employees, agents, and officers of the Customer and of third parties.

Delays: S.D. Myers, Inc. assumes no liability for delays caused by strikes, riots, floods, fires, acts of God, or any cause beyond our control, and shall not be required to supply services to the Customer while interruption of service, due to any such cause, shall continue.

Terms & Conditions: The provisions contained in this proposal/sales order/
agreement shall become part of any contract between Customer and
Contractor and shall be binding unless hereafter changed in writing
and signed by authorized representatives of both parties.

DIVISION OF TRANSFORMER CONSULTANTS

The Customer shall be responsible for any loss or expense resulting from incorrect information or data furnished by the Customer to the personnel of S.D. Myers, Inc.

S.D. Myers, Inc. assumes no liability for delays caused by strikes, riots, floods, fires, acts of God, or any cause beyond our control and shall not be required to supply services to the Customer while interruption of service due to any such cause shall continue.

It is acknowledged that the obligation of S.D. Myers, Inc. is limited to the work contracted for in this sales order/agreement. The Customer's equipment will be solely in the care, custody, and control of the Customer at all times. S.D. Myers, Inc. is in no way obligated to maintain, repair, service, replace or assure the operation of said equipment, unless special agreement for such work has been made in writing.

For reasons of personal and plant safety, S.D. Myers, Inc. personnel reserve the right to decline any portion of the work on equipment in circumstances which they deem hazardous.

The obligation of S.D. Myers, Inc. is limited to the work contracted for in this proposal. In no event shall S.D. Myers, Inc. be liable for consequential, incidental, direct, or special damages or losses arising directly or indirectly from its performance under this contract except for the actual damage to property caused by the negligence of S.D. Myers, Inc.

The provisions contained in this proposal shall become part of any contract resulting from said proposal. No other terms or conditions other than those stated herein, and not agreement or understanding oral or written, in any way purporting to modify these terms and conditions whether contained in the Customer's purchase order or elsewhere, shall be binding on S.D. Myers, Inc. unless hereafter made in writing and signed by an authorized representative of S.D. Myers, Inc. All proposals, negotiations, and representations, if any, made prior to, and referenced hereto, are merged herein.

GENERAL TERMS

ECOLOGY AND SAFETY: In order to comply in a prudent manner with ENVIRONMENTAL LAWS and SAFETY REQUIREMENTS while on the Customer's property, S.D. Myers, Inc. requires the Customer to provide our personnel with a liaison person whom the Customer considers competent in the knowledge of environmental and safety regulations pertaining to the Customer's plant.

The liaison person will have the responsibility to accompany and instruct the personnel of S.D. Myers, Inc. in observing plant safety and environmental regulations, to inspect all devices or equipment upon which our personnel have worked and assure that all valves are properly and securely closed, the valves are securely plugged or capped, and electrical devices are free of all leaks of any kind which could be the result of the work performed by S.D. Myers, Inc.

A written statement will be provided for the Customer's signature certifying that upon completion of the work there were no leaks attributable to S.D. Myers, Inc. and forever releasing S.D. Myers, Inc. their employees, agents, and officers from all responsibility for any leaks which may occur thereafter.

ELECTRICAL POWER: Unless otherwise specified, this proposal requires the Customer to supply the electric power to operate our equipment. The Customer's electrical department will make the electrical connections to the plant's electrical system. These arrangements must be made beforehand based on the requirements of S.D. Myers, Inc. If the Customer is unable to provide this power, an additional charge will be made for rental of a generator set. The required electrical power will range from 220 volt, 15 amp to 480 volt, 75 amp, 3-phase, 60 HZ. (Depending on the type of equipment used).

STORAGE AND DISPOSAL: The Customer will provide proper storage of supplies and materials shipped to the site of the operation. It may be necessary for the Customer to provide a site for the temporary storage of materials used in the servicing of the Customer's electrical equipment.

WORK HOURS: In order for some of our servicing procedures to be most effective, it may be necessary for our personnel to work anytime of the day without restricting the number of hours. Normal work days are 16 to 18 hours. If this does not meet with your company policy, we should be notified prior to starting work, so that adjustments can be made.

ACCESS AND AVAILABILITY: It will be necessary for the Customer to provide ready access at all times to the job site and to equipment to be serviced. The cost of any delays arising from the Customer's failure to provide such access will be paid by the Customer at the rate of up to \$300.00 per hour upon demand and at the option of S.D. Myers, Inc.

CERRO COPPER PRODUCTS CO.

SAUGET WORKS

P.O. BOX 66800 ST. LOUIS, MO 63166-6800 THIS NUMBER MUST APPEAR ON ALL INVOICES, LABELS, PACKING LISTS & SHIPPING PAPERS

NO.

84718

Do Not Write in This Aree

PRICE EXTENSION

PURCHASE ORDER

TO **SELLER**

QUANTITY

TRANSFORMER CONSULTY

1-800-321-9580

DESCRIPTION

SHIP TO:

RANSFORMERS

CERRO COPPER PRODUCTS CO. HIGHWAY #3, ALTON & SOUTHERN TRACKS SAUGET, ILL, 62201

DEPT.

41-806-E-4557

MARK SHIPPING PAPERS "RECEIVING CLOSES 3 P.M."

Confirmation Date Date of Req./Order Refer All Inquiries To -26 · BILBLCHANA Shipping Instructions PLANT SITE

PLEASE ENTER OUR ORDER FOR THE FOLLOWING MATERIAL OR SERVICES SUBJECT TO TERMS PRINTED ON BOTH SIDES OF THIS ORDER.

1,494.00 (1) POWER , "CONTRACTOR MUST EXECUTE LIME SELECT AND BILLS OF MATERIAL, APPROVED BY AN D HARMLESS AGREEMENT FUTHERIZED CERRO REPRESENTATIVE, MUST D SUBMIT CURRENT CERTIFI-HAE BANOICE CHEMILLED, FOR CALE OF INSURANCE SEFOR COMMENCINE "OBK " ONFIRMING Mach. Description ans FORMER Ordered by

> YOUR PRICES MUST BE EXCLUSIVE OF ALL TAXES. ANY APPLICACLE TAX WHICH YOU ARE REQUIRED TO COLLECT MUST BE SHOWN AS A SEPARATE ITEM ON ALL QUOTATIONS & INVOICES.

MAIL INVOICE IN DUPLICATE TO

P.O. BOX 66800

ST. LOUIS, MD 63166-6800

VENDOR **PURCHASING** ACCOUNTING RECEIVING | REQUISITIONOR **EXTRA EXTRA** SALMON GOLD PINK BLUE WHITE **GREEN** YELLOW

CERRO COPPER PRODUCTS CO.

COMPLETE 8-23-

Sauget, Illinois 62202

PCB ANNUAL DOCUMENT

| | Removed From Service | | In Storage for Disposal | | In Transport for Disposal | | In Service at En of Year | |
|--------------------------------|-------------------------|-----|----------------------------|-----|------------------------------|------|-----------------------------|---------------------------|
| PCBs/PCB Items in Containers . | Ne | NE | No | NE | No | NE | No. | ΝĒ |
| PCB Transformers | CI |) J | 11 |)) | 11 | : 11 | 11 | . 1) |
| PCB Capacitors | ((. |) | 11 | /) | 11 |) | WEIGH 3148 65 | H PERCAP KILLGRAM B |

A Tube Mill South & Tube Mill Worth

(B) Induction Heaters at Press

Roy Thompson

CERRO

777

CERRO COPPER PRODUCTS CO.

A member of The Marmon Group of companies

P.O. Box 681 East St. Louis, Illinois 62202 618/337-6000

February 26, 1986

CERTIFIED MAIL

Ms. Marion Young Toxic Substances Section (5S-P&TSB-7) U. S. Environmental Protection Agency 230 South Dearborn Chicago, IL 60604

RE: Notice of Noncompliance Cerro Copper Products Co.

Dear Ms. Young:

Refering to Mr. William H. Sanders' letter dated January 31, 1986 please be advised that PCB annual documents have been developed for each calendar year beginning July 2, 1978, and are kept on file at this facility.

We, therefore, certify that the violations relating to incomplete PCB annual documents, referenced in the Notice of Noncompliance attached to Mr. Sanders' letter, have been corrected.

Yours very truly,

CERRO COPPER PRODUCTS CO.

A member of The Marmon Group
of companies

Paul Tandler Vice President-Manufacturing

PT/qe

bcc: H. L. Schweich, w/letter and "notice" only
S. A. Silverstein " " "
B. Ottofy " " "
File 2400



UNITED STATES ENVIRONMENTAL PROTECTION AG

REGION 5

230 SOUTH DEARBORN ST. CHICAGO, ILLINOIS 60604

BY P.T.

REPLY TO THE ATTENTION OF:

5S-P&TSB-7

JAN 3 1 1986

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Paul Tandler Vice President, Manufacturing Cerro Copper Products Company P.O. Box 681 (Highway 3) East St. Louis, Illinois 62202

Re: Notice of Noncompliance

Cerro Copper Products Company

Dear Mr. Tandler:

On August 6, 1985, representatives of the United States Environmental Protection Agency (U.S. EPA) conducted an inspection of the Cerro Copper Products Company, P.O. Box 681, Highway 3, East St. Louis, Illinois 62202.

Enclosed is a Notice of Noncompliance issued to the Cerro Copper Products Company for violation of the polychlorinated biphenyl (PCB) recordkeeping requirements set forth in the Code of Federal Regulations, 40 CFR Part 761. During that inspection, the inspectors observed that, although company records are kept on the disposition of its PCB items, the records as PCB annual documents are incomplete. PCB annual documents must be developed to show the total number of PCB capacitors handled at the facility, including the dates when removed from service, placed into transport for disposal and the total number of PCB capacitors remaining at the facility for each calendar year, beginning July 2, 1978. These records shall form the basis of an annual document prepared for each facility by July 1 covering the previous calendar year. Failure to develop and maintain complete annual PCB documents is a violation of 40 CFR Section 761.180(a) a suggested format is enclosed for your use in preparing annual PCB documents according to the regulations.

Within thirty (30) days of receipt of this Notice of Noncompliance, Cerro Copper Products Company, must submit a certified statement that the violation has been corrected. That statement must be submitted to:

Ms. Marion Young
Toxic Substances Section (5S-P&TSB-7)
U.S. Environmental Protection Agency
230 South Dearborn
Chicago, Illinois 60604

A copy of the inspection report is enclosed for your information. If you have any questions, please do not hesitate to contact Ms. Marion Young at (312) 353-2291.

Sincerely,

William H. Sanders III, P.E.

Director, Environmental Services Division

Enclosures



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY BY P. T.

Region V

| IN THE MATTER OF: |) | |
|---|--------|-------------------------|
| CERRO COPPER PRODUCTS COMPANY P.O. BOX 681, HIGHWAY #3 EAST ST. LOUIS, ILLINOIS 62202 |) } | NOTICE OF NONCOMPLIANCE |
| 27. 27. 20013, 1221N013 02202 | ý | |

Notice is hereby given that you are in violation of the polychlorinated biphenyl (PCB) recordkeeping regulations, 40 CFR Part 761, promulgated pursuant to the Toxic Substances Control Act (TSCA), 15 U.S.C. Section 2614.

On August 6, 1985, representatives of the United States Environmental Protection Agency (U.S. EPA) conducted an inspection of the above referenced facility. During that inspection, the inspectors observed that PCB annual documents developed by the Cerro Copper Products company were incomplete. Failure to develop and maintain complete annual PCB documents is a violation of 40 CFR Section 761.180(a).

This Notice of Noncompliance is issued by the U.S. EPA in lieu of further action at this time provided these violations will be promptly corrected. Within thirty (30) days of receipt of this Notice of Noncompliance, the Cerro Copper Products Company, must submit a written, certified statement that the violations of the PCB regulations have been corrected. Failure to correct the violations and to submit such a statement may cause the U.S. EPA to proceed with additional enforcement action as provided

in TSCA, 15 U.S.C. Section 2601, including possible imposition of civil penalties.

William H. Sanders III, P.E.
Director, Environmental Services Division
U.S. Environmental Protection Agency
Region V

| Dated: | 1/31/8 | 16 |
|--------|--------|----|
| | | |

CERRO COPPER PRODUCTS CO.

A member of The Marmon Group of companies

cc: J. Hintz B. Kohnen

File

INTERNAL MEMORANDUM

HQ-10

SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

m. S. A. Silverstein ✓

DATE: June 20, 1986

FROM:

R. E. Conreaux

SUBJECT: SURPLUS TRANSFORMERS

Paul has given me the okay to proceed with the disposal of the oil from the three 1000 KVA transformers as quoted (\$3,194.00) by the Envirosure Management Corporation. Brian will follow through on this.

Two of the three are in the Non-PCB category and one is just in the PCB-Contaminated category with a PCB level of 73. If you have questions about the qualifications of this firm, please let me know.

It would also be appreciated if you would arrange for the disposal of the three empty transformers.

Cally Phopology REC/gd

R. E. Conreaux

TWI Can incinerate the non-contaminated

TWI Can incinerate the non-contaminated

ail, however they want #1.93/get - or about

ail, however they want #1.93/get - or about

to 3300 for 2 transference. Epulassue proposal

1'5 hest deal we have.

I'5 hest deal we have.

I think the empty transference can be

C01427

disposed of with no problem.

CERRO COPPER PRODUCTS CO.

A member of The Marmon Group of companies

cc: J. Hintz

R. Thompson S. Silverstein

INTERNAL MEMORANDUM

HQ-10

SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

TO. R. Conreaux

DATE: June 18, 1986

FROM: B. K

B. Kohnen

SUBJECT: 1000 KVA SURPLUS TRANSFORMERS

As you are aware, we have three (3) 1000 KVA transformers which are no longer in service but contain small amounts of PCB's (see attached analysis). One of these transformers has shorted windings, and they are all well over 50 years old.

I would suggest disposing of the transformer oil according to EPA regulations and scrapping the transformers once the oil is drained. According to the information I have gathered, this is the most economical method of handling the situation (see attached explanation of transformer catagories).

I have contacted a number of companies which handle PCB oil and transformer disposal. I have had prices ranging from \$3,194 total for the removal, shipping and disposal of all transformer oil, to \$9,240 for the removal, shipping and disposal of only one transformer's oil (see attached quotes). Obviously, the \$3,194 total lot price is the most economical, and I am assured by this company that they meet all EPA regulations concerning PCB removal, disposal and shipping. In addition, Sandy knows of interested parties concerning the scrapping of the empty transformers.

Please advise.

B. Kohnen

BK/qd

Attachments

ENVIRONMETRICS

Cerro Copper P.O. Box 691 EastSt. Louis, IL 62202 10679 Midwest Industrial Blvd. St. Louis, MO 63132 (314) 427-0550

P0#67221

1000 KVA- X-FORMER'S

ANALYSIS RESULTS

PCBs in Oil

| Sample No. | Identification | Total ppm | Type |
|------------|----------------|-------------|------|
| 1972259 | | 73 | 1260 |
| 1972260 | | 33 | 1260 |
| 1972983 | | less than l | |

*All values are \pm 10%

March 12, 1986

Eugene P. Scheide, Ph.D. Laboratory Director

Explanation of Transformer Categories

In its final PCB ban ruling*, the United States Environmental Protection Agency (EPA) divided all liquid-filled transformers into three categories with respect to its PCB content. Below is a listing and brief explanation of these three categories.

Non-PCB Transformer

Defined as any transformer in which the PCB Level in the fluid is less than 50 parts per million (ppm)

Disposal Requirements - There are no specific requirements concerning the transformer; however, the fluid may not be used for road oiling or dust control if there is any detectable PCB.

No liquid-filled transformer may be considered Non-PCB unless a sample of fluid from the transformer has been analyzed.

PCB-Contaminated Transformer

Defined as any transformer in which its fluid is between 50 and 500 ppm of PCB

Disposal Requirements - There are no specific requirements concerning the transformer; however, the oil must be disposed of in accordance with 40 CFR 761.10.*

Any transformer on which the nameplate indicates "mineral oil" may be considered to be in this category without analysis. Regular inspection is required.**

PCB Transformer

Defined as a transformer in which the PCB Level in the fluid is over 500 ppm

Disposal Requirements - Both transformer and fluid must be disposed of in accordance with 40 CFR 761.10.*

Labelling Requirements - The transformer must be labelled in accordance with 40 CFR 761.44.*

Regular inspection is required.**

^{*}May 31, 1979 Federal Register
**March 10, 1981 Federal Register



March 7, 1986

Mr. Bryan Kohnen Cerro Copper P.O. Box 681 East St. Louis, IL 62202

Dear Mr. Kohnen:

Per our conversation of this date, enclosed please find our brochure. Please note that Envirosure Management Corporation is now the sales and marketing arm for P.C.B. Inc. of Missouri.

This letter serves as confirmation of the prices quoted to you as follows:

<u>Liquids</u> - 2,565 gallons, 0-71 ppm, less than .01% water and/or solvents to be pumped from three (3) transformers: \$.90/gallon

Transportation - 253 miles @ \$3.50/loaded mile = \$885.50 (Vacuum tanker: E. St. Louis, IL to Kansas City, MO)

Payment Terms: All orders are C.O.D. unless other arrangements have been made prior to pickup.

Clear access to transformers must be provided. This quotation shall remain firm for forty-five (45) days.

If I can provide you with any additional information or answer any questions, please feel free to contact me.

Kindest regards,

ENVIROSURE MANAGEMENT CORPORATION/

P.C.B. INC. OF MISSOURI

Sheree J. Miller Marketing Consultant

SJM/sjm

Encl.

2100 Wyandotte • Kansas City, MO 64108 • (816) 471-0684 • 1-800-558-0128

irell hold piece till

7/1/86
per 5. miller 1/1/86.

SCA CHEMICAL SERVICES, INC. MIDWEST REGIONAL OFFICE

AN SCA SERVICES COMPANY

1000 E. 111th Street 10th Floor Chicago, Illinois 60628 (312) 660-7200 SCA CHEMICAL SERVICES

April 9, 1984

To Whom it may concern

SCA Chemical Services Group will continue to honor its agreement to incinerate PCB contaminated cores and oil for PCB, Inc., Kansas City, MO. Baring any unforeseen circumstances such as acts of God, planned or unplanned down time, SCA expects to accept material from PCB, Inc. on a regular basis. Please feel free to contact us with any questions or comments.

Respectfully yours,

Gerald L. Piper

Technical Sales Staff

Grend L Piece

GLP/pd



GENERAL ELECTRIC COMPANY APPARATUS & ENGINEERING SERVICES

on form FN-872

NOTICE This quotation on the services described below is subject to terms and conditions on the face and back of this letter, and is wold us accepted within 15 days from data hereof, and, in the meantime, is suit to change upon notice. It supersides all previous quotations and agreem relating to this transaction. Please refer to this quotation by number in order placed with us for described work, and address all letters to our of at 2455 Cassens Dr., Fenton, MO. 63026

March 13, 1986

Cerro Copper Co. P.O. Box 681 Sauget, Il. 62202

Attn: Mr. B. Kohnen, Electrical Engr.

Dear Sir:

This is a proposal and not an offer to enter into a contract. It may be withdrawn at any time.

When you want to dispose of PCB's, your purpose should be to accomplish complete disposal, both physically and legally. For your maximum protection from any environmental incident associated with PCB disposal, General Electric offers a firm price contract wherein...1) we are familiar with the EPA regulations and have continuing contact with the Agency in Washington; 2) we make reasonable efforts to maintain our procedures and storage facilities such as to be in compliance with the Federal EPA regulations; 3) our prices are firm and subject to future escalation and/or retroactive storage charges; 4) G.E. takes title to your material.

WORKSCOPE

We will provide all labor, materials, transportation, incineration, chemical landfill, manifesting, labels, title transfer, indemnification as required to provide your customer with an EPA compliance disposal of all PCB items.

The items to be disposed of are as follows:

16 Drums of contaminated oil at 71 PPM.

1 Drum of solid waste, contaminated.

For disposal of the above items, we quote a price of.......\$9240.00.

Sale of any service covered by this quotation is conditioned upon the terms contained herein, including those on the back of this quotation. Any additional different terms proposed by the customer are objected to and will not be binding upon the Company, unless specifically assented to in writing by the Company authorized representative.

Note that no implied warranty of merchantability or fitness for purpose applies and that any claim that the services described herein are a warranty or or obligation of the Company must be made in writing prior to, or at, the time you place your order.

Seller certifies that all goods described herein will be produced in compliance with all applicable provisions of the Fair Labor Standards Act, as amended.

GENERAL & ELECTRIC

Cerro Copper Co. Quotation #85-2021-A March 13, 1986 Page 2

We propose the following workscope.

We will send our two-man PCB certified crew to your plant site to decommission the transformer as follows:

The transformer will be drained of all liquid.

The liquid shall be containerized in D.O.T. approved 17-E drums for shipment.

Any solid waste generated will be packaged in a D.O.T. approved 17-C drum for transportation.

Cerro Copper will provide a fork lift or cherry picker and operator as required to load the drums on our General Electric truck.

All work to be performed on a straight time basis, Monday thru Friday, excluding Saturdays, Sundays, and holidays.

All liquids will be incinerated at an EPA approved and permitted incinerator.

All solids will be buried at an EPA approved and permitted landfill.

The transformer carcass shall remain at Cerro Copper's plant site and is not included as part of this quotation.

Certificates of incineration and burial shall be provided upon completion.

Supervision of the loading of the above items and manifesting of the load shall be done by a PCB certified St. Louis Service Shop representative.

Our enclosed indemnification form entitled "Special Terms and Conditions..." would apply to our workscope. (Please relay to your Legal Department for review.)

We thank you for this opportunity to be of service.

This quotation and your purchase order are subject to G.E. Management and Legal approval.

If you have any questions, please do not hesitate to contact me at any time.

Very truly yours,

F. M. Cole

Mgr., Customer Service

FMC:blt

cc: H. Dickerson, K. Carey, J. Sitek, R. Prage, B. Candy, R. Young

PCB SCIN-PCB-22622
PCB Rev. 10/1/85
Terms and Conditions

- i. Except as specifically provided hereinafter the Company's (GE) standard terms and conditions of service (FN-872) or form ISE-5 (C) apply to the extent applicable.
- ii. As used herein the word "Material" shall mean the material containing or contaminated with polychlorinated biphenyls (PCB), described in our proposal. Where concentrations of PCBs below 500 ppm are stated, attach certificates of analysis. Where certificates of analysis are not available, material will be considered to be contaminated at more than 499 ppm and disposal charges will be made based on the costs of disposing of such material.
- iii. Company (GE) represents that it has knowledge of the hazards associated with the handling, storage and disposal of the PCBs and PCB contaminated materials, that it has experience in such handling, storage and disposal; and that it shall have instructed its personnel, (and to the extent necessary) subcontractors and agents (if any) in the proper safety procedures to be used in such handling, storage and disposal.
 - iv. Customer warrants that it has full legal title to and the power and right to transfer title to the material and to arrange for disposal of the material (including, without limitation, all licenses or permits required by law or regulation to be obtained by the owner and/or generator of the material), that the material is as described in paragraph "ii" above, and that any containers provided by the customer are the suitable containers for transportation and storage of the material under all applicable law (including, without limitation, regulations issued by the Environmental Protection Agency and the Department of Transportation).
 - v. Company (GE) will perform the services set forth in the quotation in accordance with all applicable laws and regulations. Company warrants that it will have obtained all licenses and permits required by law to engage in the activities required in connection with this transaction. Company represents and warrants that any storage site and any disposal facility to which the materials may be moved are in compliance with any and all federal, state and local laws and regulations pertaining thereto, including but not limited to, the regulations contained in 40 CFR Chapter 1, Part 761, and that they are suitable to receive and/or dispose of and may lawfully receive and/or dispose of the materials.

GENERAL & ELECTRIC

SCIN-PCB-22622 Rev. 10/1/85

- vi. Title to the material will pass to the Company (GE) when the material is loaded on a vehicle provided by the Company (if Company provides transportation) or when the material is off-loaded at a facility designated by Company (if customer provides transportation). In the event that the material is later determined to be of a nature or character different than that described in our quotation, title shall pass back to the customer and, unless otherwise agreed, Company may return the material to customer at customer's expense and customer shall be liable for and shall indemnify Company against all losses, damages and claims caused by the material including any damage to the environment except if such losses, damages or claims are the result of the negligent or other tortious act or omission of Company.
- vii. Company (GE) agrees to indemnify, defend and save customer (including its officers, directors, employees and agents) harmless from and against any liability, expense or loss resulting from the failure by Company, its agents or subcontractors to comply fully with every federal, state or local law, statute, regulation, rule, ordinance or government directive which directly or indirectly regulates or affects the collection, handling, storage, transportation or disposal of the materials to be disposed of by Company, hereunder and from and against any and all claims, suits and liabilities, directly or indirectly based upon damage to, or destruction of, any property (including the property of Company) or injury (including death) to any person arising out of or attributable to any negligent or willful act of the Company, its agents or subcontractors in the collection, handling, storage, transportation or disposal of the materials to be disposed of by Company hereunder. In the event of any liability arising out of the joint negligence of Customer and Company, each shall be liable to the other and any damaged third party in proportion to its relative degree of fault.

paragraphs 8.(b) and 8.(c) of Company's Standard Terms and Conditions of Service (FN-872), and paragraphs (a) and (b) of "Limitations of Liability" of Standard Conditions for Services - Form ISE-5 (C), shall not apply to claims under the indemnity of this paragraph except that in no event shall Company be liable to Customer for loss of use of property belonging to Customer or in Customer's care, custody, or control.

ENVIROSURE

\$3,194.00 Total Lot - All transformer oil removed, shipped and disposed of. (See Quote)

TRADE WASTE INCINERATOR, Sauget, Il.

\$1.93/gallon + shipping costs \$1.93 x 2565 = \$4,950 + shipping costs

CHEMICAL WASTE

Oil Disposal = 30¢/pound x 7 pound/gallon x 2565 gallons = \$5,386.50 Shipping \$3.41/mile x 262 miles (Chicago) = 893.42 Total Cost \$6,279.92

GENERAL ELECTRIC

\$9,240.00 for Transformer Oil @ 73 ppm only. (See Quote)

WESTINGHOUSE

\$39,500 for disposal of oil and transformers

CERRO COPPER PRODUCTS CO.

A member of The Marmon Group of companies

INTERNAL MEMORANDUM

cc: Sandy Silverstein

J. Hintz R. Thompson

- MAUDIEN

HQ-10

SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

10: Dave Durham

DATE September 26, 1983

FROM: A. Murillo

SUBJECT: Disposal of 3 1000 KVA Transformers

Following up on last week's conversation, I'd like to start the paper-work to sell the referenced transformers.

One of these transformers is contaminated with PCB (about 75 ppm) and the three are leaking.

I had preliminary talks with Mr. Thomas Feeney, General Manager of Dowzer Electric Co., P. O. Box 829, Mt. Vernon, Illinois, 62864, phone (618) 242-0140, and he offered to buy these units for a salvage value of \$90.00 each. However, at the time of this offer, we were talking about having Dowzer do some dechlorination in other transformers This is no longer the case as we cannot remove the transformers from the site and Dowzer does not have equipment for in-plant, on-site dechlorination.

I do not know if you are aware of the difficulty of getting rid of old transformers, particularly those contaminated with PCB's. Therefore, it would be ideal if we could find someone who is willing to take these old devices from the site.

Thank you for your help in this matter.

AM/jl

PROCEED TO DISPOSE OF THE ABOVE 3 TEMX AS BEST YOU

DOUT FORGET THAT THE TWO PCB TPMX IN TURS MILL

REQUIRE FILTRATION OR REPLACEMENT OF OIL FOR WHICH SOME

AMEANGEMENT SHOULD BE MADE SOON.

Such

C01428

Explanation of Transformer Categories

In its final PCB ban ruling*, the United States Environmental Protection Agency (EPA) divided all liquid-filled transformers into three categories with respect to its PCB content. Below is a listing and brief explanation of these three categories.

Non-PCB Transformer

Defined as any transformer in which the PCB Level in the fluid is less than 50 parts per million (ppm)

Disposal Requirements - There are no specific requirements concerning the transformer; however, the fluid may not be used for road oiling or dust control if there is any detectable PCB.

No liquid-filled transformer may be considered Non-PCB unless a sample of fluid from the transformer has been analyzed.

PCB-Contaminated Transformer

Defined as any transformer in which its fluid is between 50 and 500 ppm of PCB

Disposal Requirements - There are no specific requirements concerning the transformer; however, the oil must be disposed of in accordance with 40 CFR 761.10.*

Any transformer on which the nameplate indicates "mineral oil" may be considered to be in this category without analysis. Regular inspection is required.**

PCB Transformer

Defined as a transformer in which the PCB Level in the fluid is over 500 ppm

Disposal Requirements - Both transformer and fluid must be disposed of in accordance with 40 CFR 761.10.*

Labelling Requirements - The transformer must be labelled in accordance with 40 CFR 761.44.*

Regular inspection is required.**

*May 31, 1979 Federal Register
**March 10, 1981 Federal Register



CERTIFICATE OF DESTRUCTION

Work Order# 86-0053 Document# 86-PCBG-53 Date 8-15-86

ro:

Cerro Copper Products

P.O. Box 681

E. St. Louis, IL 62202

P.O. # N/C

FROM: S. D. Myers, Inc.

180 South Avenue Tallmadge, OH 44278

This document is to certify that S. D. Myers, Inc. has completed Chemical Destruction of the Customer's PCBs by utilizing our PCB GONE Process as outlined in our PCB Destruction Permit and approved by the United States Environmental Protection Agency.

The following data itemizes the results of our PCB Chemical Destruction Process at our Tallmadge, Ohio facility.

| Customer # | Manifest Number | Date Received | Gallons | Starting PCB-PPM | Aroclor | Outgoing PCB-PPM | Date Process Finished |
|------------|--------------------|------------------|---------|---------------------|---------|---------------------|--------------------------|
| 7320000 | IL1628253 | 8-05-86 | 1100 | < 500 PPM | 1260 | < 2 PPM | 8-09-86 |

NOTE: Outgoing PCB-PPM is the maximum result obtained from the oil at the completion of the work.

n P. Wunderle, Jr.

Manager, Environmental Services

file# pcbgone.53 certificate of dest. disk

CERRO COPPER PRODUCTS CO.

A member of The Marmon Group of companies

INTERNAL MEMORANDUM

HQ-10 SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

10: Paul Tandler

DATE December 17, 1983

FROM: Sandy Silverstein

SUBJECT: PCB Control

I have reviewed the data attached to the November 28 letter from Joshua D. Margolis. As far as I can determine, we have no condition that requires action at this time.

We presently have two transformers that are PCB units (more than 500 ppm) and seven transformers that are PCB contaminated (50 to 500 ppm). Attached list identifies these nine units.

Al Murillo and I have been investigating various sources of service for dechlorinating the two PCB transformers, and as soon as one more proposal is received, we will be ready to proceed. It has taken more than three months to investigate all possibilities, none of which are particularly attractive from a viewpoint of cost or convenience.

SAS/jpl

ENVIRONMETRICS

10679 Midwest Industrial Blvd. St. Louis, MO 63132 (314) 427-0550

Cerro Copper P.O. Box 681 East St. Louis, IL 62202

ANALYSIS RESULTS

PCBs in Oil

 Sample No.
 Identification
 Total ppm
 Type

 36914
 G.E. #1663323 500 KVA 1Ø
 66
 1242 & 1260

at Avado Solo.

*All values are \pm 10%

November 17, 1986

Eugene P. Scheide, Ph.D. Laboratory Director

C01432

CERRO COPPER PRODUCTS CO.

A member of The Marmon Group of companies

cc: H. L. Schweich

J. Matcuk

INTERNAL MEMORANDUM

File 1000 —

HQ-10

SHOW NAME, TITLE AND UNIT OF ADDRESSEE AND ADDRESSOR

to Paul Tandler

DATE: August 12, 1985

FROM: Sandy Silverstein

SUBJECT: EPA Visit - PCB's

On Tuesday afternoon, August 6, we were visited by Marcie Kleban and Greg Czajkowski of the U.S. EPA. We had been previously advised that they were coming on a routine visit involving their area of responsibility which is the use, storage and disposal of PCB's.

After obtaining general information regarding the history and operations of this plant, they inquired of equipment that we used or stored which was known or suspected to contain PCB's. They were shown our transformer log which contains detailed information on each transformer in our plant including annual inspections and testings for PCB content. They were also shown in this log documentation which was evident of last year's processing whereby two transformers that contained PCB's were detoxified and reclassified by Transformer Consultants Company. They were satisfied that this information met all of the record keeping requirements.

They then inquired of our use of capacitors and were advised that the only capacitors in this plant were those installed on the induction heaters at the Extrusion Press and we did not believe they were "large" capacitors. We were given a copy of the EPA's definition of "large" capacitors and after checking the size of the capacitors at the induction heaters, it was agreed that those capacitors met this designation. We were given a copy of a suggested form used for record keeping of capacitors and we told them that we would establish a log in conformance with that sample and institute a program of regular inspection and recordings of same. They commented that they did not consider our failure to have a record of these capacitors to be a matter of serious concern.

They also inquired of our hydraulic systems which include reservoirs of 30-gallon capacity or more. We informed them that we had a large number of such systems and all systems were filled with either a water-oil emulsion or straight mineral hydraulic oil, therefore, no PCB's would be involved in these systems.

We invited them to be conducted into the plant to view any of the transformers or capacitors but they declined, stating that the information that they had been supplied was sufficient.

SAS/jpl



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

230 SOUTH DEARBORN ST. CHICAGO, ILLINOIS 60604

REPLY TO THE ATTENTION OF 5S-P&TSB-16

JUL 2 9 1985

Mr. Paul Tandler Vice President, Manufacturing CERRO Copper P.O. Box 681 East St. Louis, Illinois 62202

Dear Mr. Tandler:

The U.S. Environmental Protection Agency (U.S. EPA) is engaged in a nation-wide program of inspections to determine compliance with the final Rule for Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions. These regulations are set forth in 40 CFR 761 (Federal Register, May 31, 1979, pp. 31514-68 and amended by the Federal Register of August 25, 1982).

Section 11 of the Toxic Substances Control Act (TSCA, 15 USC 2601 et seq.) provides the authority for inspections in administering the PCB Regulations.

It is our understanding that your company possibly handles or has handled PCBs in its operations which are defined to include PCB chemical substances, PCB mixtures, PCB articles, PCB equipment, PCB containers, etc. Inspectors Greg Czajkowski and Marcie Kleban will meet with you on Tuesday, August 6, 1985, at approximately 2:00 p.m. to inspect your facility. If you have any questions, please call me at (312) 353-2291.

Sincerely,

John Connell, Chief

PCB Unit

Toxic Substances Section

Loy Depleive your verosog ave more complete them
min on PCB's - please have them available
for this mertain.

Couly

Co1434



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

230 SOUTH DEARBORN ST. CHICAGO, ILLINOIS 60604

FEFLY TO THE ACTION OF 5S-P&TSB-16

JUL 2 9 1985

Mr. Paul Tandler Vice President, Manufacturing CERRO Copper P.O. Box 681 East St. Louis, Illinois 62202

Dear Mr. Tandler:

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Sincerely,

. John Connell, Chief

PCB Unit

Toxic Substances Section

CC H.L. SCHWETCH

S. A. SILVERTON

B.OTTOPY

C01435

JANU: You And Roy on Brim Sances Homes we Thru. I Advance we pro in Good And

1/3

PCB ANNUAL DOCUMENT* (A SUGGESTED FORMAT)

| Removed from Service** | | Storage for Disposal | In Transport for Disposal / | | 1 | In Service at End of Year | | |
|---|---|----------------------|-----------------------------|-------------|------|---|--|--|
| Dates | ١ | | | | 1 | | | |
| Quantities | | | | | 1 | Quantities | | |
| * PCBs/PCB Items in Containers | | | | | / | * PCBs/PCB Items in Containers | | |
| - Total kg - ID of Contents | | | | | /// | - Total kg - ID of Contents | | |
| ▲ Liquid ▲ Capacitors | | | | | /// | ▲ Liquids ▲ Capacitors | | |
| * PCB Transformers | | •• | | | / | * PCB Transformers | | |
| - Total Number - Total kg of PCBs in Transformers | | | | · | //// | - Total Number - Total kg of PCBs in Transformers | | |
| * PCB Capacitors | | | | | / | * PCB Capacitors | | |
| - Total Number | i | | | | / | - Total Number | | |

^{*}A. Document required if facility is using or storing at one time:

- 1. At least 45 kg (99.4 lb) of PCBs; or
- 2. 1 or more PCB transformers; or
- 3. 50 or more PCB large capacitors.
- B. Document must be prepared by July 1 for previous calendar year.
- C. Document must cover Jan. I thru Dec. 31 for any calendar year.
- **D. Removed from Service:
 - 1. Location of initial disposal or storage facility.
 - 2. Name of owner or operator of the facility.

| (z) # | US KVA C C C C C C C C C C C C C | 1 1/20 8 | DEW BIP & SO | TRANS KORMERS |
|-------|---|----------|----------------|---------------------|
| 700 | y Kva | 12 | 0.5 \$ 47 B | NOT IN SERVICE, WAS |
| | 500 KVA | 7/ | | REMOVED |
| | 1000 KVA | 9 | TH - NECTURICE | BALLAST |
| | 72000 KUA, 30 126 | 30 120 | HIT | |
| | 1500 KM, 30 | 30 | 7 = | |

W ..K S C 2500 KVA 3750 KVA, 31 1500 KUA 2500 KVA (02) (29.5 No . BLDS 80, ExTR. - INDU. HEATERS , X7, TM, NORTH 8700211 NO 2 PM

M

4 PCB TENDSFORMER >500 PM

TRANSFORMER CONSULTANTS DIVISION OF S.D. MYERS, INC. P.O. BOX 3575 AKRON, OHIO 44310

CERRO COPPER PRODUCTS

DATE: DEC. 8, 1983

PO BOX 681

QUOTE NUMBER: 33-15124

EAST ST. LOUIS, ILLINOIS 62202

ATTN: MR. SANDY SILVERSTINE

This proposal is for the destruction of PCB's which have contaminated the oil in the transformers listed below

This page replaces item 7A through 7E of the cost summary sheet, all other conditions still apply

| тс | | SERIAL | GALLONS | TOTAL | | UNIT | SERVICE |
|------------|---------|-------------|---------|---------|----------|------------|---------|
| NUMBER | MFG | NUMBER | OF OIL | PCB | AROCL | COST | CODE |
| * 4 | WEST | PAV 8417 01 | 372 | 7 2 | 1242 | \$ 3 6 5 4 | 6 |
| * 5 | GE | 1972259 | 855 | 71 | 1260 | \$4153 | 3 |
| *12 | GE | D 460938 | 360 | 226 | 1242 | \$4626 | 8 |
| *13 | WEST | PCR 90211 | 340 | 126 | 1260 | \$2346 | 4 |
| *14 | WEST | PAV 8369 01 | 297 | 19Q | 1242 | \$3870 | 8 |
| *30 | A/C | 3333451 | 776 | 69 | 1260 | \$3798 | 3 |
| *34 | WEST | SAV 3638 01 | 521 | 216 | 1242 | \$6558 | 8 |
| *35 | WEST | PBV 0830 01 | 294 | 750 | 1260 | \$2511 | 5 |
| *36 | WEST | SAV 4359 01 | 389 | 860 | 1260 | \$3223 | 5 |
| 9 | T/UNITS | | 4204 | TOTAL U | NIT COST | = \$34739 | 21324 |
| | | | • | DISPOSA | L COST | = \$ 9 0 0 | |

TOTAL JOB COST = \$35639

THESE PRICES ARE GOOD FOR 60 DAYS.

GUARANTEE: * After 3 months, the PCB content of the mineral oil will be non-PCB as defined in 40 CFR 761.

> **After 3 months, the PCB content of the mineral oil will be between 50 and 500 ppm PCB.

It will be the responsibility of the customer to comply to 761.30, paragraph (2),(V) of 40 CFR 761, in order to reclassify the units.

POWER REQUIREMENTS: 480 VOLTS, 3 PHASE, 60 AMPS WORK HOURS PREDICATED ON A 15-17 HOUR WORK DAY*6 DAYS/WK*MONDAY THRU SATURDAY.

LOCATION OF PCB CONTAMINATED TRANSFORMERS

| Tag | # 4 | 2000 | KVA | (spare) | | 72 | ppm |
|-----|-----|------|-----|---------------|---------------------|-----|-----|
| Tag | #12 | 315 | KVA | Inductrol | Tankhouse | 226 | ppm |
| Tag | #13 | 2000 | KVA | Ballast | Tankhouse | 126 | ppm |
| Tag | #14 | 1500 | KVA | 460 Volt | Tankhouse | 190 | ppm |
| Tag | #16 | 500 | KAV | 1 PH 460 Volt | Tankhouse | 69 | ppm |
| Tag | #30 | 3750 | KVA | 4160 Volts | Ajax Heaters | 69 | ppm |
| Tag | #34 | 2500 | KVA | | #2 P.M. Bldg. 80 | 216 | ppm |

FACT SHEET

PCB Capacitor Removal Deadline

September 1988

The use of certain polychlorinated biphenyl (PCB) large electrical capacitors is prohibited after October 1, 1988, by the Federal regulations found at 40 C.F.R. Part 761.

PCB large capacitors that pose an exposure risk to food or feed may not be used or stored for reuse after October 1, 1988. other uses of PCB large capacitors are also prohibited, with the exception of those used within a restricted-access electrical substation or in a contained and restricted-access installation.

A contained and restricted-access indoor installation has no public access. It does have an adequate roof, walls and floor to contain any release of PCBs within the indoor location. An example of a restricted-access electrical substation is an outdoor fenced or walled facility that restricts public access and is used for the transmission or distribution of electrical power.

Federal regulations define PCB large capacitors as those capacitors that have a volume of more than 200 cubic inches or contain three or more pounds of dielectric fluid. PCB small capacitors are those capacitors with a volume of less than 100 cubic inches or those which contain less than three pounds of dielectric fluid. A capacitor whose volume is between 100 and 200 cubic inches may be considered to contain less than three pounds of dielectric fluid if the total weight of the capacitor is less than 9 pounds.

Intact, non-leaking PCB small capacitors are not regulated by the federal PCB regulations for purposes of disposal. The Environmental Protection Agency (EPA) recommends, however, that when several PCB small capacitors are banded together or connected in a bank, the disposal method be determined by the combined amount of For example, if it can be assumed that the combined weight of the dielectric fluid in several capacitors connected in a bank is greater than three pounds, the EPA recommends that those capacitors be disposed of in accordance with the requirements applicable to PCB large capacitors.

Large capacitors must be disposed of in a PCB incinerator or an EPA-permitted alternate PCB disposal facility unless the label, nameplate, or manufacturer's information shows that the capacitors contain no PCBs.

If the PCB large capacitors which have been removed from service and designated for disposal are leaking or will be stored for longer than 30 days, or if the PCB small capacitors are leaking, they should be placed in a drum with enough sorbent material to all the liquid. The drums should then be stored in a facility which meets the Federal requirements.

Further information concerning the requirements of the PCB regulations may be obtained from the Toxics and Pesticides Branch of the U.S. Environmental Protection Agency, Region VII, 726 C Minnesota Avenue, Kansas City, Kansas 66101, (913) 236-2835, or from the TSCA Assistance Line, Washington, D.C., at (202) 554-1404.

PCB CONTAMINATED TRANSFORMERS

INFO: JOHN DESLEM (AMAX ZIM) 274-5000

VAUGHN MESTICEN (TWI)

Y.J. KIM (EPA- REGIONE) (312) 353-2000

BOB STONE (EPA- REGIONE) (312) 353-2000

APPROVED INCINERATORS

ROLLINS INCINERATOR - DEERRIES, 75 (713) -479-6001

ENSCO - ELDORADO, PRE. (501) 863-7173

" - LITTLE ROCK - CHARLES ROBERTSON (501) 375-8484

OF MILDRED MOTY

DECHLORINATION - MOBILE UNITS, MOVE TO SITE

TRAUSFURMER (DRISULTANITY, ARROW, O. (216) 929-2847

DOWZER ELEC - MT VERNOP, IL. TOM FEENEY (618) 242-0190

SUN OHIO - CANTON, O. (214) 452-0887 TED SAVASTANO

" (216) 761-3411 KEUIN MC MANOM

ACCURATE - CINCINNATI, O. (513) 474-4420 LEO WHITEMAH

RETRO SERV, INC. - PANCHO CORDONA, CAUT. 800-233-6600

PROCESS OIL < 500 PPR - GREATER, DRAIDE REMIL BY SILICONE (19/44)

P.C.B.

4.0. NEST WEST 1000KUA U U WEST 1500 KUA WEST. WEST. ロかり INDUCTROL 2 500 8.84 4500 KVA 3750 KVA 2000K1A 1000 KUA 200 D KUA.

372 GAL 72 P.P.M.
8555" "NOW STRUET | P.P.M.
360"" 226""
340"" 126""
176"" 190""
776"" 750""
294" "750""
2860""

4204

9 WRITS ABOVE SO P.P.M.

EPA Guidelines for Determining Amount of PCB Fluid in PCB Capacitors

The following are the guidelines EPA allows people to follow in determining the amount of PCB fluid in your capacitor in the absence of other specific information such as name plate data. Please remember that the regulation refers to the weight of the fluid, not the weight of PCBs.

1/4/82

If the volume of the capacitor shell is less than 100 cubic inches, then the capacitor may be assumed to contain less than 3 pounds of PCB fluid and designated as small.

If the volume of the capacitor shell is greater than 200 cubic inches, then it is assumed to contain more than 3 pounds of PCB fluid and is to be designated as large.

A capacitor whose volume falls within the 100-200 cubic inches range commonly contains 35% PCB fluid by weight. Therefore, those capacitors weighing less than 9 pounds total will be considered small, and those weighing more than 9 pounds total will be considered large.